

**UNIVERSITY OF VAASA**  
**SCHOOL OF ACCOUNTING AND FINANCE**

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**DO SUCCESSFUL CEOS GAIN MORE POST-TENURE OUTSIDE  
DIRECTORSHIPS?**

Master's Degree Programme in Finance

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**ABSTRACT**

The main purpose of this study is to examine whether firm performance during CEO tenure affects the CEO's chances of being selected to the board of another company. Many CEOs are interested in serving on a board of directors during their professional career as well as after retirement from CEO duties, but poor firm performance during the CEO tenure might decrease their chances of receiving those independent directorships. The empirical part of the thesis focuses on companies in the financial sector of S&P 500 –index.

This thesis also studies whether the CEOs' role on the board affects the chances of being selected to a board of directors after their tenure as CEO has ended. In other words, is a CEO who also serves as the chair of the board more likely to get selected to another company's board after the CEO tenure is over? In addition, this study also examines whether CEOs' length of the tenure has any effect when it comes to receiving post-tenure independent directorships.

ROA, ROE, and abnormal returns are calculated for each company and for each time period a certain CEO was at helm. Thus these variables act as the measures of CEOs' success. These variables are then compared to the number of outside board seats the CEOs gained post-tenure, thus giving us the answer to the question at hand. The same is done with the length of CEOs' tenures and CEO duality.

Out of the six variables used in this study, five have little to no effect on the number of outside directorships for CEOs. The only variable with statistically significant effect is the length of tenure. It has a negative correlation to the number of board seats. In other words, the longer the tenure of CEO lasts the smaller the number of boards seats gained post-tenure.

**KEYWORDS:** CEO, outside directorship, tenure, success



**VAASAN YLIOPISTO****Kauppätieteellinen tiedekunta**

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**TIIVISTELMÄ**

Tämän tutkimuksen tarkoitus on selvittää vaikuttaako yhtiön menestys toimitusjohtajan mahdollisuuksiin saada jäsenyyksiä muiden yhtiöiden hallituksista, kun ura toimitusjohtajana on ohi. Suurin osa toimitusjohtajista on kiinnostuneita toimimaan eri yhtiöiden hallituksissa uransa aikana, kuten myös kun rooli toimitusjohtajana on ohi. Toimitusjohtajan johtaman yhtiön heikko menestys saattaa kuitenkin vaikuttaa negatiivisesti mahdollisuuksiin saada ulkopuolisia, itsenäisiä jäsenyyksiä hallituksista.

Tutkimus tarkastelee myös vaikuttaako toimitusjohtajan rooli oman yhtiön hallituksessa mahdollisuuksiin saada jäsenyyksiä muiden yhtiöiden hallituksista, kun toimitusjohtajuus on ohi. Toisin sanoen, onko hallituksen puheenjohtajana toimineella toimitusjohtajalla paremmat mahdollisuudet tulla valituksi muiden yhtiöiden hallituksiin. Lisäksi, tutkimus tarkastelee vaikuttaako toimitusjohtajuuden kesto todennäköisyyteen saada toimitusjohtajuuden jälkeisiä hallituspaikkoja.

Tutkimuksen jokaiselle yhtiölle lasketaan koko pääoman tuottoaste, oman pääoman tuottoaste sekä epänormaalit tuotot siltä ajalta, minkä kukin tutkimuksen toimitusjohtaja oli johdossa. Näin ollen nämä arvot mittaavat toimitusjohtajan menestystä. Näitä muuttujia verrataan kunkin entisen toimitusjohtajan saamiin ulkopuolisten yhtiöiden hallitusjäsenyyksien määrään. Sama tehdään myös toimitusjohtajuuden keston ja toimitusjohtajan kaksoisroolin suhteen.

Tutkimuksessa käytetystä kuudesta muuttujasta viidellä ei ole juurikaan merkitystä hallituspaikkojen määrään. Vain toimitusjohtajuuden kestolla on tilastollisesti merkittävä vaikutus. Sillä on selkeä negatiivinen korrelaatio hallituspaikkojen määrään. Toisin sanoen, mitä pidempi ura toimitusjohtajana, sitä vähemmän uran jälkeisiä jäsenyyksiä ulkopuolisista hallituksista.

**AVAINSANAT:** Toimitusjohtaja, ulkopuolinen hallitusjäsenyys, ura, menestys



## 1. INTRODUCTION

Managers and executives are often concerned about their career horizons. These concerns are caused by both external and internal labor markets. External labor market provides outside opportunities for executives, and internal labor market controls the terms and the quickness of promotions in one's own organization. These concerns can be seen to mitigate agency problems. Executives realize that poor performance will downgrade the value of their abilities and the demand for their service. This can motivate executives to aim for better long-term performance in the eyes of shareholders, thus reducing possible agency problems. These kinds of problems are greatest for young managers and executives, who will be an active part of work force for several decades to come. It is quite often argued that these concerns vanish in executives' last years before retirement, due to their diminished need to seek promotions or new positions in the future. (Brickley et al., 1999)

This study examines whether executives' career horizon concerns truly end at retirement or, to be more exact, the end their tenure as CEOs. Many former executives decide to stay active during retirement by for example serving as directors in different kinds of boards. They can have post-tenure board seats on corporate boards and/or on the boards of museums, operas, universities, and other non-corporate institutions. If the two following conditions are met, executives will have career horizon concerns even during their last years before retirement. First, the executives must be interested in post-tenure opportunities when it comes to staying professionally active. Second, executives' performance during last years of tenure must correlate positively with the availability of these opportunities. (Brickley et al., 1999)

Many executives face difficulties when they should let go at the end of a full career. Obstacles between staying active and retiring may be financial, social, or psychological. This phenomenon is called the retirement syndrome. At retirement, the single-minded careerists might experience certain emptiness. This may be caused by psychological and physical effects of aging, or the edifice complex, in other words, the wish to leave a legacy. These feelings, alongside with financial and social reasons, such as the

executive status to which they have been accustomed, often drive executives to staying active after retirement by continuing their work on previously received directorships, or by accepting new board seats. (de Vries, 2003)

It is widely debated that whether the board membership of a company's former Chief Executive Officer (CEO) has a positive or negative effect on the company's performance. Majority of the studies state that the former CEO has a positive effect on the board and on the firm performance. On the other hand, institutional investors and their proxy advisors often find the effect negative, as do other board members. Including a former CEO to the board might also have a negative effect on the governance quality of the firm. (Fahlenbrach et al., 2011)

Negative effects of appointing or retaining a former CEO on the board of directors are that the transfer of power may not be clean, the former CEO might be reluctant to changes in corporate policies, or he or she might undermine to authority of the new CEO. On the other hand, the former CEO usually has the most accurate and detailed firm-specific knowledge, because the former CEO is not dependent on the new CEO, when it comes to firm-specific knowledge. This often makes him a valuable advisor to the new CEO and the rest of the board, as well as effective in monitoring the management. The question of using former CEOs on boards comes down to this tradeoff: valuable advice and effective monitoring versus possible entrenchment and power struggles. (Fahlenbrach et al., 2011)

In addition to the career-horizon concerns of retiring CEOs, this study examines the career-horizon concerns of CEOs, who are not retiring, but whose tenures as CEOs of their company are coming to an end. There are multiple reasons why the tenure of these CEOs might be coming to an end: they might have received an opportunity to move to an executive role in another company, their contract might be coming to an end, or they might be removed from the company due to subpar performance. Whatever the reasons might be these CEOs are most often looking for a new CEO position in another company. They are also often eager to gain directorships in other companies. It is,



however, unclear what are the deciding factors when it comes to former CEOs receiving outside directorships.

### 1.1. Purpose of the study

The main purpose of this study is to examine whether firm performance during CEO tenure affects the CEO's chances of being selected to the board of another company. Many CEOs are interested in serving on a board of directors during their professional career, as well as after retirement from CEO duties, but poor firm performance during the CEO tenure might decrease their chances of receiving those independent directorships. The focus of this study is on the companies in the financial sector of S&P 500 –index.

This thesis also studies whether the CEOs' role on the board affects the chances of being selected to a board of directors after their tenure as CEO has ended. In other words, is a CEO, who also serves as the chair of the board, more likely to get selected to another company's board after the CEO tenure is over? In addition, this study also examines whether CEOs' length of the tenure has any effect, when it comes to receiving post-tenure independent directorships.

### 1.2. Structure of the study

This thesis consists of a theoretical part and an empirical part. The theoretical part will introduce the key research studies on this matter so far. It also explains the concepts of agency theory, CEO duality, powerful CEOs, CEO succession, and career horizon concerns. Some historical background of this field is also provided.

The first chapter includes background information, purpose of the study and the research problem. The second chapter introduces the previous research that is relevant to this study, including previous results on the effects of firm performance during CEO

tenure, CEO age, tenure length and CEO duality. The third chapter introduces the financial ratios and indicators used in this study. It also provides theoretical background, explaining the concepts of agency theory, CEO duality, powerful CEOs, CEO succession, and career horizon concerns.

The empirical part of the thesis consists of chapters four and five. Chapter four presents the data and explains how it was collected, as well as the methodology of this study. This chapter also states the research problem more specifically by forming hypotheses based on the theoretical background and the previous literature. Chapter five presents the analysis and the empirical results and discusses them. Finally, chapter six concludes the study. The last chapter also provides some ideas for further research.

## 2. LITERATURE REVIEW

Brickley, Linck & Coles (1999) identify 277 CEOs from 257 companies, who retired from the CEO duties from 1989 to 1993. They find a strong positive correlation between performance while on the job and the likelihood of serving on board after retirement. Abnormal stock returns during the last two years of CEO tenure seem to play a particularly important role in explaining the CEO's chances of getting selected to the board of the same company. This evidence suggests that the chance of continued board service may reduce horizon problems during the last years of CEO's tenure. Accounting returns over CEO's tenure explain the likelihood of getting a board seat on other companies' boards better than abnormal stock returns. Overall, the findings suggest that the prospect of post-retirement board service can be used as an alternative source of CEO incentive. (Brickley et al., 1999)

Lee (2011) analyzes board seats held by retired CEO's. Lee focuses on CEO's who have retired between 1989-1993, 1995-1999 and 2001-2005. He finds that the popularity of retired CEOs on boards decreased after the Sarbanes-Oxley Act (SOX), which came into effect in 2002. While Brickley et al. (1999) find that accounting returns explain the likelihood of seats on outside boards during 1989-1993, Lee states that it does not have the same effect for the later samples. Company's stock performance during a CEO's tenure has a negative correlation with outside board seats only in the last sample. Lee also finds, that the size of the CEO's original company correlates positively with the number of post-retirement outside directorships before the Sarbanes-Oxley Act. However, this effect seems to disappear after the Sarbanes-Oxley Act. (Lee, 2011)

Fahlenbrach, Minton & Pan (2011) examine whether appointing the former CEO to the board has a positive or a negative effect on firm performance. Their data consists of 2087 CEO turnovers at publicly traded firms in the United States from 1994 to 2004. They find that 50 % of the former CEOs get selected to their board at least once, and 36 % at least twice. A former CEO is more likely to get reappointed at least twice if the firm performed well during the CEO tenure. Also, reappointment is more likely when

the board of directors is less independent, the successor CEO is inexperienced, the tenure of the former CEO is long, and if the former CEO is also the founder of the firm. These findings suggest that powerful and successful CEOs are more likely to get reappointed to the board. Firms with former CEO on board seem to perform better on average. They are often also willing to step back in as CEOs if needed. (Fahlenbrach et al., 2011)

CEO turnover is often seen as a board's decision to either retain or replace the CEO. Evans, Nagarajan & Schloetzer (2010) introduce a third option they call "retention light". In retention light, the incumbent CEO is replaced, but at the same time retained on the board for an extended period of time. According to the study, former CEOs often have unique monitoring skills and advising abilities. On the other hand, the former CEO might try to gain personal benefits by exploiting the available rights to decision-making. After all, a retention light CEO has more influence and better decision-making rights than those of CEOs who exit the company altogether. Evans et al. (2010) also find out, that CEO is more likely to be retained on the board when firm performance is higher. Although, this relation seems to become weaker when the incumbent CEO reaches the usual retirement age. At that time, the CEO power becomes more important. Firms with retention light CEOs are more likely to choose a successor CEO with weaker bargaining power than firms with CEOs exiting the company altogether. Finally, a decision to retain a non-founder CEO has a negative impact on firm's post-turnover financial performance. (Evans et al., 2010)

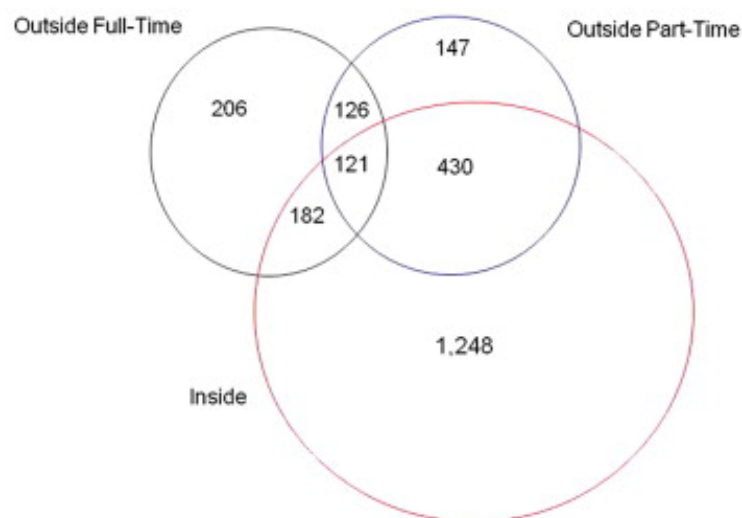
Outside CEOs are actively sought after by companies to join their boards. Fahlenbrach et al. (2010) show that appointing an outside CEO to the board has certification benefits for the appointing company. The number of outside directors – both CEOs and others - on boards has increased since the enactment of the Sarbanes-Oxley Act of 2002. In addition to the effect of SOX, appointing outside directors has other benefits too. For instance, Fahlenbrach et al. (2010) show that appointing the first outside CEO to the board results in a higher stock-price increase than the appointment of another outside board member. Appointing company's operating performance, CEO compensation, and decision-making are not affected by the appointment of a CEO director. On the other

hand, appointing an interlocked director seems to result in a decrease in operating performance. (Fahlenbrach et al., 2010)

Kaplan & Reishus (1990) study the effect of firm performance on high executives' service on outside boards. Measuring performance by using dividend cuts, they find that executives who have reduced their company's dividend cuts are approximately 50% less likely to be appointed on additional outside boards than executives who do not reduce their companies' dividends. In addition, the probability of the top executives losing or resigning from outside directorships they hold correlates negatively, but not significantly, with the performance of their own companies. (Kaplan & Reishus, 1990)

While outside CEOs are sought-after additions to a board, the number directorships held by CEOs vary substantially. Booth & Deli (1996) investigate the factors that cause the difference in the number of board seats held by CEOs. They find that the number in question is mostly driven by the nature of CEOs' firms. CEOs of companies with great growth potential hold fewer directorships than CEOs of companies that consist mainly of assets-in-place. CEO's marginal product in growth-orientated companies is relatively higher. Thus, it would be more costly to draw the attention of the CEO elsewhere. CEOs also appear to hold more outside directorships as they begin to transfer their decision-making rights to their successors-to-come. This partly confirms the theory that CEOs' career-horizon problems do not end at retirement. (Booth & Deli, 1996)

Total CEO Departures = 2,911  
No New Position = 451



**Figure 1.** An illustration of 2911 former CEOs' employment status within two years of their departure. Inside position means a position within the firm for which the CEO used to work. Non-executive director positions are considered to be part-time, and executive director positions are considered to be full-time. Positions outside of boardroom are divided into part-time and full-time based on full text descriptions and titles. (Liu, 2014)

In most cases, the departure of CEO is decided together by the company and the CEO. Most of the studies on CEO turnover or career change examine the reasons or the effects from the company's perspective. Liu (2014) suggests that CEO turnover outcomes are also affected by the labor market conditions for CEOs. She assesses CEOs' employment options by using their position on director and corporate executive networks. The connectedness is positively related to the likelihood of CEO leaving the current position. Also, the sensitivity of turnover-to-connectedness is weaker for top-performing CEOs than CEOs who perform poorly. CEOs likelihood of leaving for another full-time position, or retiring and taking a part-time position somewhere else, is also increased by the connectedness of the CEO. However, this does not have a significant effect on the likelihood of CEO stepping down and remaining with the same company in other capacities, for example as a board member or chairman of the board. In other words, the probability of CEO turnover is increased by the connectedness expanding CEOs' outside options. (Liu, 2014)

A large number of retired CEOs have directorships in multiple companies. on these boards they are considered to be outside or independent directors. There is a significant demand for talented outside directors on the director labor market. Masulis & Mobbs (2014) examine how these directors distribute their limited time and effort between the different boards. They conclude, that reputation of directors is a powerful incentive for these outside directors. Directors seem to distribute their efforts between boards unequally, and the distribution is often based on the relative prestige of the directorships. Directors' board attendance rate rises and, following that, firm performance improves, when directorship's relative ranking experiences an exogenous increase. In addition, when company's performance declines, directors are less willing

to leave the directorship, if it is considered more prestigious. Also, when a large proportion of outside directors see the directorship as more prestigious, the sensitivity to fire the CEO following poor firm performance rises. When CEOs, whether retired or not, receive offers to be independent directors, they weigh the different directorship options based on their reputation and prestige. They also need to consider how much of their limited time they are willing to give to directorships altogether. These decisions, with the abilities and reputation of CEOs themselves, affect the number and quality of directorships they hold. (Masulis & Mobbs, 2014)

There are a lot of different incentives for both working and retired executives to accept outside directorships. The same incentives often motivate the directors to perform better. Such incentives are for example compensation, replacement, and the increasing possibility to receive additional directorships. Yermack (2004) examines the effects of these three incentives on outside directors of Fortune 500 companies. Together these incentives lead to the wealth of outside directors increasing approximately 11 cents for every \$1,000 that the company's value increases. Furthermore, 1 standard deviation change in typical firm performance leads to a \$285,000 change in outside directors' wealth. Although these performance sensitivity numbers are smaller than they are for CEOs, they are still substantial. (Yermack, 2004)

### **3. THEORETICAL BACKGROUND**

This chapter provides information about some theories and concepts that are important to understand when discussing the dynamics and relationship between the board of directors and the CEO. Knowing these concepts will help one to understand the effects that different kinds of CEOs have on boards, and vice versa. In addition, this chapter explains the reasoning and the motivation behind former CEOs' decisions to continue their work by accepting post-retirement directorships. First, the concept of firm performance is explained. This also includes a few performance related indicators. Then I'll continue to explain agency theory, CEO duality, powerful CEOs, CEO succession, and CEOs' career horizon concerns.

#### **3.1. Firm performance**

Company's financial performance measures the ability of the company to generate profits by using its assets. In other words, it measures subjectively a company's capability to use its assets gained from its primary business model, and generate revenues. This term can also be used to generally measure a company's overall financial health during a certain time period. Furthermore, it is used to compare similar companies of a given industry, or to compare different sectors or industries. Firm performance can be measured in several ways, and all the measures should be taken into account. Different tools to measure firm performance are cash flow from operations, revenue from operations, operating income, total unit sales, abnormal stock returns, and accounting returns, just to name a few.

##### **3.1.1. Abnormal stock returns**

Abnormal returns are simply the difference between the actual return and the expected rate of return of a security or a portfolio. Abnormal stock returns measures this difference, but namely just for stocks. When the stock returns of a single company are



compared to the whole market, S&P 500 –index is usually used as a proxy for the whole market, and thus for the expected rate of return. Abnormal stock returns can also be measured against a certain sector of the market, for example when comparing a single company from financial sector to the whole financial sector. Abnormal stock returns are used as an indicator when measuring firm performance. By examining abnormal stock returns, one can see whether the company's stock has performed better or worse than expected. Positively abnormal stock returns during CEO tenure are in some cases associated with CEO being retained on his own board after retirement. (Brickley et al., 2000)

$$\text{Abnormal stock returns} = \text{Stock returns} - \text{Expected rate of return}$$

**Formula 1.** Abnormal stock returns

3.1.2. Accounting returns

While abnormal stock returns affect the likelihood of former CEOs getting retained on their own boards, accounting returns affect their chances of receiving outside directorships after retirement (Brickley et al., 2000). Such indicators are return on assets (ROA) and return on equity (ROE).

Return on assets measures a company's profitability in relation to its total assets. In other words, ROA tells how much of the earnings are generated from assets, or invested capital. For public companies, ROA may fluctuate significantly. It is also highly industry-dependent.

$$\text{Return on assets} = \text{Net income} / \text{Total assets}$$

**Formula 2.** Return on assets

Return on equity measures the profitability of a company. It tells the amount of profit a firm creates with the invested money from shareholders. In other words, ROE is the amount of net income that is returned as a percentage of shareholders equity.

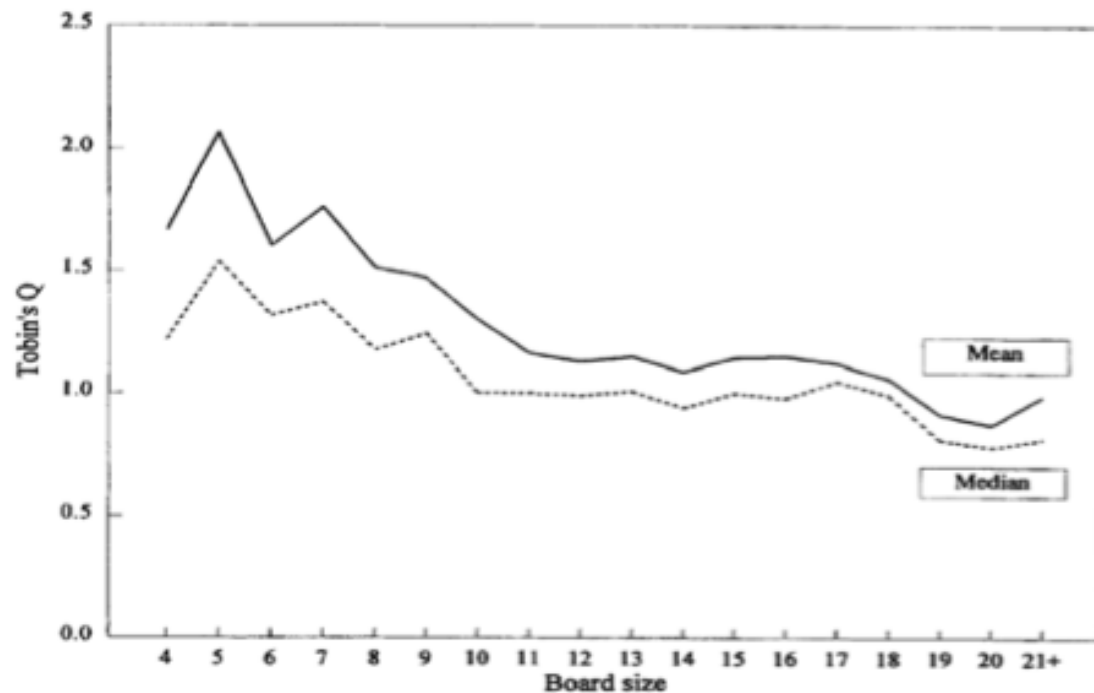
$$\text{Return on equity} = \text{Net income} / \text{Shareholder's equity}$$

**Formula 3.** Return on equity

### 3.2. Agency theory

Agency theory originates from financial studies. Amongst the financial and economic studies, it is more popular and more examined than other theories of this matter, such as the stewardship theory or the resource dependence theory. It is based on the assumption, that there is a natural conflict of interest between the executives and the shareholders of a company. The reason for this conflict of interest is simply that managers or executives are often not shareholders. Thus, they do not think like shareholders. Executives should base their decisions and actions on the best interest of the shareholders, but because they do not own shares, their decisions may be based on the possibility to gain own advantage instead. (Fama & Jensen, 1983)

Agency theory states that a relatively small board is better option than a large board. In a small board, communication and decision-making are more efficient. For example, firing the CEO is easier for a smaller board with majority of outside directors. In addition, a small board suffers less from asymmetric information between the CEO and the board members (Yermack, 1996). In his study, Jensen (1993) proves, that when the number of board members increases above eight members, the efficiency of the board decreases, and it becomes easier for the CEO to control or manipulate the board. This in turn leads to decrease in performance.



**Figure 2.** The effect of board size to Tobin's Q in large public companies in the United States in 1984-1991. (Yermack, 1996)

According to agency theory, majority of the board members should be independent directors. They are needed to monitor the executives and managers in situation where there is a conflict of interests between the management and the shareholders. Outside directors are often CEOs of other companies, and they usually have multiple board seats. Outside directors may also have retired from their other duties, but still continue to work on multiple boards. Due to their experience from multiple boards, and their work on other companies, outside directors are often seen to have more experience and more knowledge, when it comes to monitoring the management. On the other hand, multiple board seats of outside directors may have a negative influence. In these cases, they have too many directorships, and they have to divide their limited time between them. Thus, multiple directorships may cause scheduling difficulties or even conflicts of interests. In addition, outside directors tend to make their decision a bit more carefully than executive-directors. According to agency theory, if the board makes decisions that lead to poor performance or bankruptcy, the risk of losing their reputation is larger for outside directors than executive-directors. (Kiel & Nicholson, 2003)

The number of outside directorships held by an executive or a retired executive is not restricted by regulation. Reformers often argue that executives should not have multiple board seats, due to their value-destroying tendencies for their companies. However, these tendencies are largely affected by existing agency problems. According to Perry & Peyer (2005), executives receiving outside directorships lead to negative announcement returns only when the executive's company already has substantial agency problems. In contrast, additional outside board seats for executives lead to higher announcement returns when the executive's company has fewer agency problems. In addition, announcement returns are affected by the industry of the company offering the outside directorship. When an executive receives an outside directorship from high-growth, financial, or related-industry company, the announcement returns are positive. In conclusion, outside directorships for CEOs can increase firm value. This has valuable implications for companies, whose executives are offered outside board seats, as well as for policies recommending restricting the number of outside board seats. (Perry & Peyer, 2005)

According to agency theory, CEO cannot act as the chairman of the board. Instead, the CEO should either be just an executive, or at most, a regular board member. The board should make the large-scale decisions, whereas the CEO and other executives should focus solely on implementing these decisions. A separation of the CEO and COB roles makes it easier for the board to monitor the management more effectively. This will lead to better performance and a raise in company value. (Muth, 1998)

The quality of monitoring enhances when most of the outside directors serve on at least two out of the three main monitoring committees. In these cases, companies experience increased correlation between CEO turnover and firm performance, as well as reduces in earnings management, and decrease in excess executive compensation. However, the improved quality and increased intensity of monitoring come at a cost: The ability to give strategic advice becomes weaker, and managerial myopia increases. In addition, these companies experience diminished corporate innovation and poor acquisition performance. When corporate innovation and acquisitions are important value drivers or

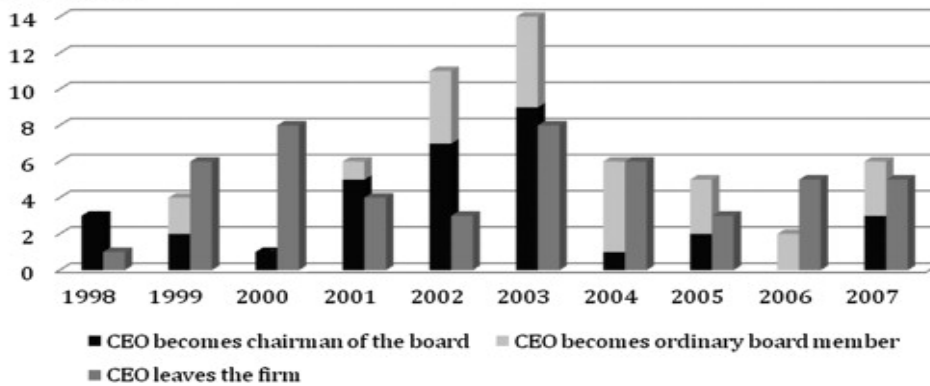
complexity of company's operations is high, the negative advising effects tend to outweigh the benefits created by improved monitoring. (Faleye et al., 2011)

Due to SOX, some companies are forced to increase the ratio of independent directors to executive-directors. They do this by either adding outside directors to the board, or by dropping executives from the board. The effectiveness of adding outside directors to the board is largely dependent on the cost of acquiring information about the company. When the cost of acquiring information is high, adding outside directors to the board has a negative effect on firm performance. When the cost is low, adding outsiders has a positive effect. This suggests, outside directors can have a real effect on firm performance, whether the effect is positive or negative. To successfully increase the ratio of outside directors to the board, companies must learn when to add outsiders, and when to drop insiders. (Duchin et al., 2010)

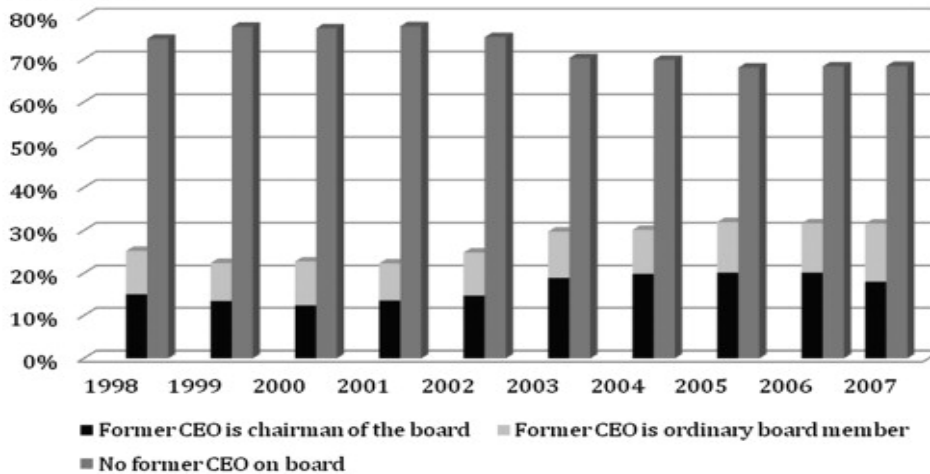
CEO duality is still quite common in S&P 500 –companies, even though the trend nowadays is to separate the roles. Instead, former CEOs are often appointed as chairs of the supervisory board. This practice is widely debated due to possible conflicts of interests. These problems are usually related to agency theory. Former CEOs are often seen as an asset due to their unique ability to give advice to their successor. However, as the chair of the board, their duties also include monitoring the successor, as well as being involved in setting their pay. Companies with the former CEO as the chair of the supervisory board tend to pay higher salaries to their executives. There is also weak evidence that the compensation paid for the supervisory board is higher, when the former CEO holds the chair position. However, shareholders see the transition of the predecessor to the supervisory board as positive news, according to short-run event studies. In addition, the effect this phenomenon has on operating performance and share prices is either neutral or positive. Thus, these kinds of CEO transitions should not cause concern for the shareholders, despite the increasing compensation for the executives. (Andres et al., 2014)

**A: CEO turnover**

# Annual obs.

**B: Firm-year observations**

% Annual obs.



**Figure 3.** A. Descriptive statistics of unforced CEO turnover for different categories.  
 B. Descriptive statistics of former CEOs' role on the supervisory board. (Andres et al., 2014)

The Sarbanes-Oxley Act (or SOX) is a United State federal law that was enacted in 2002. It sets new or expanded requirements boards of public companies in the U.S., as well as for management and public accounting firms. Certain parts of SOX are also applied for privately held firms. SOX was created after numerous large scale corporate and accounting scandals, such as Enron in 2001 and Worldcom in 2002. SOX includes sections that add criminal penalties for particular misconducts, cover the responsibilities of boards of public companies, and requires the Securities and Exchange Commission to regulate definitions on how public companies should act according to the law. (Securities and Exchange Commission)

With the enactment of SOX in 2002 came requirements for board independence. Half of the board members must now be independent directors. Large number of companies was already compliant with the demands to alter their board structure. About 56 % of these firms add independent directors after the enactment of SOX to comply with the regulations. However, 26 % of the companies decrease their board's independence by removing outside board members to move closer to the required 50 %. For these firms, the performance sensitivity of CEO turnover decreases significantly after the enactment of SOX. In addition, for some firms the requirements of SOX result in major changes in board independence. These large changes seem to be extremely harmful for the monitoring capabilities of boards. These unintended consequences are in clear contrast with the purpose of SOX. (Dah et al., 2014)

### 3.3. CEO duality

CEO duality means that the same person acts as both CEO and the chairman of the board (COB). Majority of S&P 500 –companies still have CEO duality, although the trend nowadays is to separate the roles. Corporate financial scandals have led to questioning of the effectiveness of the prevalent board leadership structures. Companies are mandated by regulations to disclosure justifications if they wish to have CEO duality. Due to these regulations, and pressure from activist investors, a growing number of companies have decided to separate the roles. Critics of CEO duality claim that it increases problems related to agency theory, such as reduced effectiveness of monitoring, and more opportunities for CEOs to make self-serving decisions. These views are rather predominant, although literature has not yet offered definitive conclusions in the matter. (Dey et al., 2011)

Even though regulations like SOX, alongside with activist investors, have been pressuring companies to separate the roles of CEO and COB for over a decade, the change is rather slow. In the beginning of 2000s, about half of the new North American and European CEOs were also named as COBs. In 2009, the number of new CEOs who were also named as COBs was 16.5 % in North America and 7.1 % in Europe (Favaro

et al., 2010). By 2007, 13 % of S&P 500 –firms had a truly independent COB, even though SOX mandated them to move closer to the practice of independent chairman. One of the reasons for the slow change is that some investors are quite reluctant to separate the roles. Mutual funds support 34% of the shareholder proposals that wish to separate the roles. At the same time, they support 90% of the proposals that wish for declassification of the board (Morgan et al., 2011). (Yang & Zhao, 2014)



**Figure 4.** Percentage of U.S. firms with CEO duality, 1978-2010. (Yang & Zhao, 2014)

When choosing between CEO duality and separating the roles, companies evaluate the costs and benefits of the possible options based on their economic and business environments. Companies that separate the roles due to environmental pressure tend to face negative impacts on performance on average. Companies that are likely to benefit more from CEO duality face larger negative impacts when separating the roles. Furthermore, the relation between the changes of board leadership structure and changes in pay-performance sensitivity of CEO compensation are aligned with arguments of optimal contracting. (Dey et al., 2011)

Even though regulators are pushing for companies to separate the roles of CEO and COB, vast majority of S&P500 companies still have CEO duality. There are various reasons for this, and some of them are overlooked by regulators and shareholder activists. Separating the roles creates multiple costs for companies, such as information



costs, costs of needing to change and re-evaluate succession processes, costs created by inconsistent decision-making of two leaders, and costs of controlling the behavior of the new COB. Despite the regulations, the right choice for one company is not necessarily the right choice for another company. Instead, the optimal choice depends largely on the economic environment of the company. (Brickley et al., 1997)

It is quite common for companies to split the roles temporarily during a succession process: When the new CEO begins his duties, the predecessor is retained as COB for a while. When the successor has settled in, and the company is running smoothly under the new CEO, the predecessor steps down from the chair position, and the successor replaces him. Most of the companies revert back to CEO duality over time. In situations where the roles are divided more or less permanently, the chairman usually has very detailed knowledge of the firm, and often also owns relatively high number of stocks. In fact, in those rare occasions where the COB is not a former executive of the company, he tends have a longer affiliation with the company than the CEO, as well as own a larger amount of stocks. (Brickley et al., 1997)

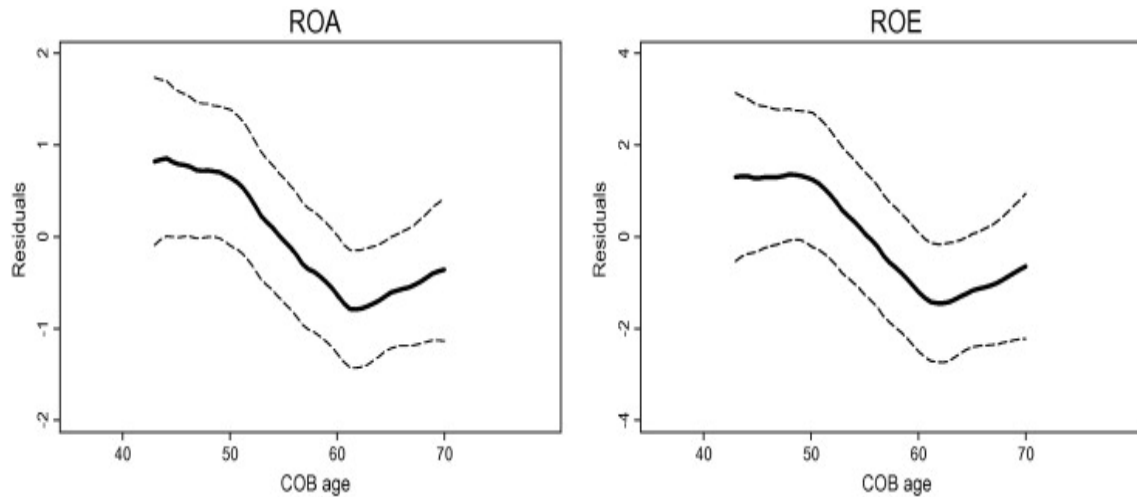
It is often argued, that CEO duality leads to decrease in quality monitoring of the top management, and consequently to increase in serious agency problems. One of board's key functions is to hire and, if necessary, fire the CEO. Understandably, CEO duality makes it harder for the board to replace top executives following poor performance. Decrease in the effectiveness of board monitoring due to CEO duality can be predicted to lead to decrease in sensitivity of executive turnover to firm performance. In contrast, separating the CEO and COB roles increases the likelihood of CEO or other top executive turnover after a period of poor firm performance. (Goyal & Park, 2002)

Changes in competitive environment can have a large influence on the relation of CEO duality and firm performance. For example, after the exogenous shock provided by the Canada-United States Free Trade Agreement in 1989, firms with CEO duality performed 3-4% better than non-duality firms. This difference is positively correlated with the quality of corporate governance and the amount of information costs. CEO

duality seems to help companies making fast decisions, and save information costs. (Yang & Zhao, 2014)

According to Krause & Semadeni (2014), there are three forms of separating the roles of CEO and chairman: apprentice, departure, and demotion. The apprentice separation is sort of an affirmation of the CEO/chair's performance. When CEO/chair leaves the CEO duties, he or she is still retained as the chairperson. The other two separations are seen as more of a correction. In demotion, the CEO/chair loses the chair position. In departure, he or she loses both roles. Krause & Semadeni (2014) study the antecedents of these three forms of separation. They find that each form of separation have different backgrounds in prior firm performance, career horizon of the incumbent CEO, and the independence of the board. These factors seem to drive the structural leadership choices of the firm. (Krause & Semadeni, 2014)

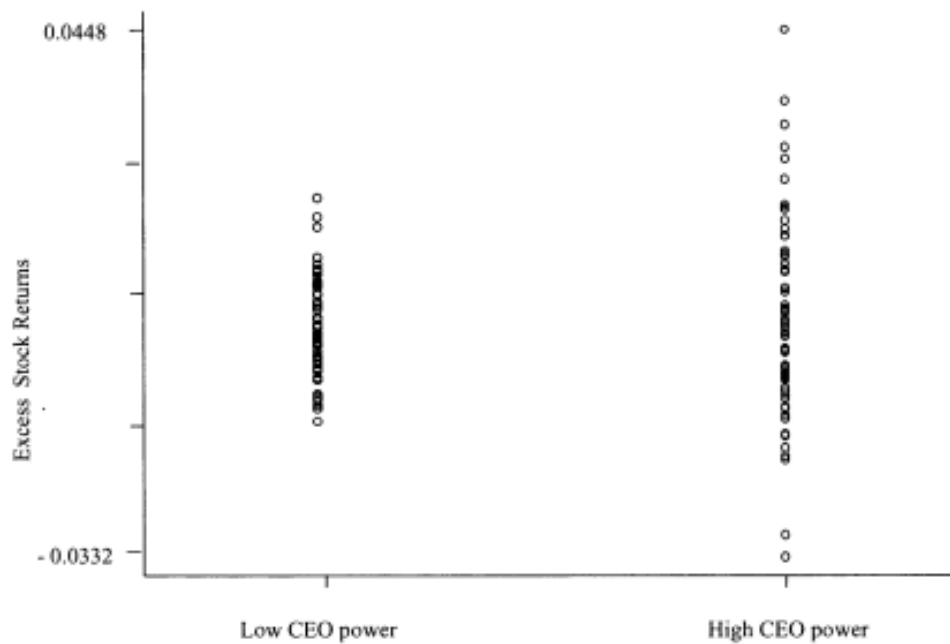
Retention light CEOs, who have undergone the apprentice separation, are usually near or over the retirement age, which in some cases is mandatory. They still hold the position of chairman of the board, but often only for a couple of years. While one possible explanation for this is the will of the COB to retire after giving the needed advice and counseling for the new CEO, Waelchli & Zeller (2013) offer another possible explanation. When COBs, as well as everyone else, reach a certain age, they start to experience substantial fluctuations in motivation, and their cognitive abilities start to deteriorate. When it comes to unlisted firms, there is a significant negative correlation between COB age and firm performance. Since COBs age just like everyone else, it is rather safe to assume that this is the case in listed companies also. Although, the effect in listed companies might be smaller, due to better governance and better decision-making processes. (Waelchli & Zeller, 2013)



**Figure 5.** The relationship of COB age and firm performance measured with ROA and ROE. (Waelchli & Zeller, 2013)

### 3.4. Powerful CEOs

Executives need to have influence over company's crucial decisions, if they wish to impact firm outcomes. Powerful CEOs are often said to have to have this kind of influence over other executives and the board, due to his titles and formal position, possible status as the only insider on the board, and possible status as founder. When the decision-making power is centralized to CEO, the firm performance tends to vary more. Adams et al. (2005) find that firms with powerful CEOs experience more variation in their stock returns. Thus, firm performance is greatly affected by interaction between organizational variables and executive characteristics. (Adams et al., 2005)



**Figure 6.** Average stock return residuals for different levels of CEO power. (Adams et al., 2005)

CEO's power or dominance is usually defined as the amount power CEO has compared to other management (Finkelstein & Halebian, 1993). Furthermore, it is the capacity certain individuals have to exert their will. When it comes to corporate executives, the power originates from different sources, such as ownership, expertise, prestige, and structural characteristics of the company (Finkelstein, 1992). Essentially, it is "a property of social relationship, not an attribute of the actor" (Pettigrew, 1973, p. 26). In other words, it is not so much based on individual-level construct, like personality and behaviors, but on relational construct. Although somewhat alike, CEO power or dominance should not be confused with CEOs' hubris, narcissism, or charisma. These concepts are characterizations of individual CEOs, whereas CEO power describes the relationship of power between the CEO and other management or the board. While hubris, charisma, and narcissism can lead to CEO taking similarly bold actions as a powerful CEO, without a strong base power, even narcissistic, charismatic, or hubristic CEOs will face difficulties when trying to take bold actions. (Crossan et al., 2011)

In recent years, CEO power has been an increasing concern for researchers, regulators, and shareholder activists. There are two quite polarized views when it comes to powerful or dominant CEOs. They are seen as either some sort of corporate destroyers or, less often, as heroes. This polarization of the views originates from the fact that firm performance and stock returns of companies with powerful CEOs tend to vary a lot. In reality, the impact of powerful CEOs on firm performance is not so direct, but more indirect. Powerful CEOs often implement more deviant strategies to their firms, and thus the firms experience extreme performance, in other words big wins or big losses. The effect of powerful CEOs can be controlled and mitigated with a right kind of board. A powerful board has the ability to mitigate the tendency of powerful CEOs towards extreme performance. Also, a powerful board can control the effect the powerful CEOs have on firm performance: When the board is powerful, the effect of powerful CEO is more often positive. However, a less powerful board leads to powerful CEOs effect on firm performance being more negative. (Crossan et al., 2011)

CEO power, which can partly be defined by CEO tenure, CEO share ownership and CEO duality, is most often negatively related to firm performance, even when controlling for ownership structure and board composition. The power of CEO decision-making could be a factor increasing the use of power on the board. Thus, it leads to decrease in firm performance. Furthermore, board structure and the compensation of the board has no significant effect on the decision-making power of the CEO. In addition, highly centralized ownership structure correlates negatively with firm performance. This implies, that high equity owners may not always be able to effectively monitor the CEO and governance structures of the company. (Adams & Veprauskaitė, 2013)

In some occasions, a powerful CEO is able to control or manipulate the board nomination process. Usually the CEO opts for an advisor-heavy board, and thus does not have to undergo such heavy monitoring. In some of these cases, however, CEO has incentives to form a board that is mostly focused on monitoring. These boards are less likely to create incrementally new information, and are therefore more likely to delegate more decision-making power to the CEO. On the other hand, powerful CEOs are able to

entrench themselves by purposely making the ongoing projects more complex. Due to this fear of CEO entrenchment, shareholders tend to sometimes select more of an advisor-heavy board. In both of these cases, the substantial power of the CEO makes the selection of board composition more strategically purposeful, rather than just focusing on the tradeoff between its monitoring and advising capabilities. (Baldenius et al., 2014)

When it comes to large public corporations, increase in CEO power can increase agency problems, and thus decrease the value of company's shareholders. One of the reasons for CEOs gaining more power is awards given to them. During the two decades, CEO awards have increased both in quantity and prominence. These awards, together with large media coverage of the winning CEO, are important factors pushing the CEO closer to superstar status. Exogenous shocks to CEO power, such as awards, are usually followed by distorted CEO behavior and higher compensation for the CEO, mainly in form of stocks and options. Receiving awards and gaining media coverage not only increases CEO power, but also often leads to CEO indulging in activities that do not create value for the company, but for CEO himself. Such activities include outside directorships, playing golf, and writing books. More importantly, award winning CEOs tend to engage in earnings management more often. All of these effects are signs of poor corporate governance, and they tend to lead to decreasing firm performance. This destruction of value is mostly concentrated in companies with relatively weak shareholder rights and poor corporate governance. The economic consequences of this phenomenon are quite substantial: After winning an award, CEOs tend to underperform their peers by 15%-26% during the following three years. (Malmendier & Tate, 2009)

### 3.5. CEO succession

Situations, where the former CEO stays on as either a board member, or especially as COB, have often severe effects on the successor CEO. Situations like these occur when a retiring CEO stays on the board as retention light, or when a company wants to separate the roles of CEO and COB, and chooses to use the apprentice separation method. This often restricts the successor's discretion, and makes it more difficult for

him or her to make strategic changes. It also makes it harder for the successor to improve the company's performance from the pre-succession levels. This means that while the predecessor might be able to give valuable advice to the successor, the influence of the successor is suppressed by the presence of the former CEO. Quigley & Hambrick (2012) even found, that even though the presence of the former CEO is supposed to prevent the company from experiencing big drops after succession, it rather tends to prevent the new CEO from improving performance. (Quigley & Hambrick, 2012)

Brookman & Thistle (2009) examine the determinants and the risk of CEO termination, and its effect on firm value. They find that for the first thirteen years of tenure, the risk of termination increases. After thirteen years, it decreases slightly with CEO tenure. 82 % of CEO tenures last less than 13 years. The tenure seems to increase with compensation and performance, and decrease with monitoring by the board. The effect on performance lasts for more than a year but diminishes over time. In addition, also incentives such as the prospect of a board seat in the future seem to increase the length of the tenure, as does stock ownership. On the other hand, option compensation seems to be endogenous and does not affect the length of CEO tenure. (Brookman & Thistle, 2009)

After the enactment of the Sarbanes-Oxley Act in 2002, CEO turnover has not become more likely, and the tenures of CEOs have not significantly shortened. These results are in contrast of the beliefs that were predominant before the enactment of SOX. One contributing factor in this phenomenon is that CEOs have become more risk averse in the post-SOX era. However, intensified monitoring and the financial press in the post-SOX era have caused financial restatements. These have had some effects on the probability of CEO turnover, as well as on CEO tenure, although this cannot be completely contributed to SOX. In few occasions, SOX has weakened the effect of firm performance on CEO risk aversion, and the effect board monitoring has on CEO tenure. Even though CEO risk aversion has increased, partly due to the increased monitoring after the enactment of SOX, there is no significant evidence of impact from the

accuracy and transparency of financial reporting mandated by SOX. (Davidson et al., 2010)

Low firm performance is usually considered to be the main cause of forced CEO turnover. When evaluating the performance of a company, and thus the CEO, the board should account for exogenous factors, such as industry performance and market performance. There is some evidence of boards adjusting for peer group performance when assessing CEOs, but the adjustment is too small to remove the effects caused by industry performance, and to a lesser extent market performance. Thus, boards allow themselves to be affected by exogenous shocks when evaluating the possibility of CEO turnover. CEOs, who have underperformed their peers, are more likely to be fired after bad industry returns. Meanwhile, the probability of outperforming CEOs getting fired increases only slightly, at most. In addition, there is some proof of boards filtering more visible indicators more efficiently, for example the value-weighted industry and the market. This suggests that boards tend to measure CEO's performance only against the more notable measures of peer performance. Also, company's performance during a recession shows the true quality of CEO better than company's performance on booms. All in all, boards' evaluation of CEOs and their performance mistakenly take into account factors that the CEOs cannot affect. (Jenter & Kanaan, 2015)

Announcements about CEO turnover or departure are usually followed by a negative market reaction, especially when it is the only news the company releases during a three-day period surrounding the announcement. Both ROA and industry-adjusted ROA also decline following the announcement. Due to this, companies often try to mitigate the negative effects of CEO departure announcement by releasing other announcements at the same time. These announcements are often related to dividends, earnings, or changes in the boardroom. The negative effects of CEO departure announcements are indeed mitigated with simultaneous announcements, because in these cases there are no significant market reactions. The reason for the departure of CEO also affects the market's reaction. If the reason for departure is dismissal or the CEO getting a new job, the negative market reaction is greater than when the reason is for example retirement. This suggests that the market is predicting possible succession problems in such



companies. However, the negative reaction by the market to dismissals and CEOs getting new jobs might be an over-reaction, since the likelihood of failed CEO succession is the same in all cases. In addition, some firms try to suppress the news of CEO departure by not officially announcing them. This can be seen as somewhat rational, since the stock market reaction would be negative, or CEO departure could even be seen as a sign of firm failure. However, these firms are more likely to experience subsequent failure in the form of bankruptcy, delisting, or over-taking. This also explains why firms who make the proper announcements tend to release good news at the same time. (Dedman & Lin, 2002)

CEOs compensation can usually be divided into two parts: the constant base salary and performance based pay-at-risk part. Incumbent CEOs may oppose to renegotiating their contracts, but when CEO succession or turnover occurs, the board often sees an opportunity to negotiate a new compensation package for the successor. According to Davidson & Elsaid (2009), the structure of the successor's contract is highly influenced by the predecessor's contract. However, successor's compensation is 69 % higher than to predecessor's. This is caused by the boards desire to link the successor's compensation more closely to firm performance. In other words, the constant base salary does not change much, but the performance-based part of the salary increases substantially, both in terms of dollars and proportion of the total compensation. (Davidson & Elsaid, 2009)

The relation of constant base-salary and performance-based salary in successor compensation package is affected by multiple factors. A strong board is better able to negotiate the compensation package, and they usually want to keep the salary of the successor tightly linked to firm performance. This effect is strengthened when the bargaining power of the successor is weak. When the board is weaker, or when the bargaining power of the successor is greater, the proportion of the base-salary is larger. In addition, corporate governance and ownership structure also affect the CEO compensation. When governance is weaker and the managers have greater control of the company, the CEOs salary is greater and less tied to performance (Core et al., 1999; Gomez-Mejia & Tosi, 1989). (Davidson & Elsaid, 2009)

The structure and the amount of salary are also affected by whether the successor is an outsider or an insider. To lure the qualified outside successor, the board often needs to settle for a contract that consists more of base-salary and less of performance-based salary. The overall amount of salary is also higher for the outside successor. Outside candidates have often more bargaining power than insiders. If an outsider chooses to accept the offer, he or she must often move to a new city or even a new country, as well as work in a new, unfamiliar company. These factors result to them facing both personal and family costs, thus making their initial salary demands even higher and less performance-based. Outsiders also face a larger risk of failure as CEO (Finkelstein & Hambrick, 1995). Inside candidates do not usually have these problems. (Davidson & Elsaid, 2009)

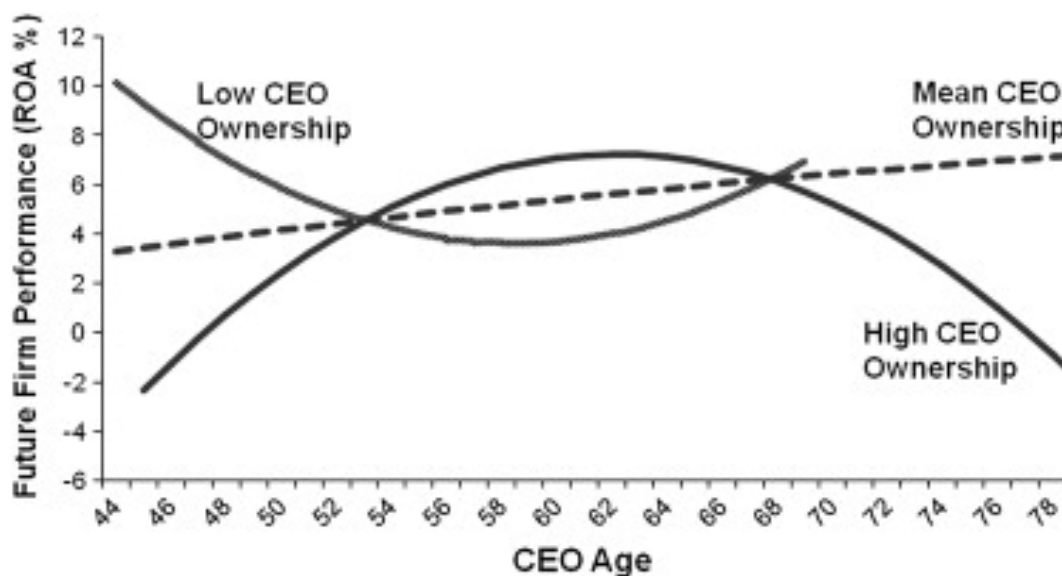
### 3.6. Career horizon concerns

When CEOs are approaching retirement or otherwise the end of their tenure, they often worry about what comes next. These concerns are called career horizon concerns, and they often lead to CEOs making decisions that are not best for the company, but instead show themselves in a good light. These decisions cause agency problems, such as risk of asymmetric information, lower firm valuation, and other agency costs. CEOs' decision making should be based on long-term value creation, but when the end of tenure approaches, they tend to prefer investments that offer relatively faster paybacks. This makes the CEO look better in short-run, and makes it easier for them to receive job offers after the tenure ends. These actions partly remove the possible career horizon concerns of CEOs, but do it at the expense of proper long-term value creation of the firm. (Antia et al., (2010)

Ali & Zhang (2015) study the changes in CEOs' incentives to manage the companies' reported earnings during the tenure. In the early years of tenure, the earnings overstatement is greater than in the later years. This relationship is less clear when the firm has greater external and internal monitoring. The findings suggest that new CEOs

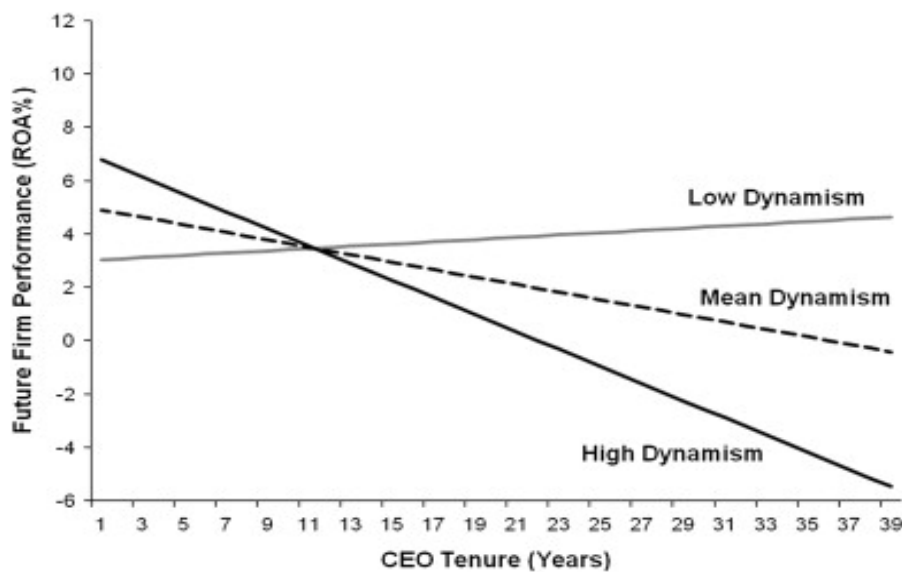
try to positively influence the market's perception of their skills and abilities during the first years of tenure. This is when the market is still uncertain and can be manipulated by the CEO. The overstatement of earnings seems to also be higher during the last year of CEO tenure, which is consistent with career horizon concerns of the CEO. However, this result is valid only when the CEO has overstated the earnings also in the first years of tenure. (Ali & Zhang, 2015)

When CEOs are in the final years of their tenure, they tend to improve their companies' short-term earnings performance by managing their companies' discretionary investment expenditures. Dechow & Sloan (1991) examine a large sample of firms in industries with significant ongoing research and development (R&D) activities. When studying the behavior of R&D expenditures, they find that CEOs in their final years of office spend less on R&D. However, the results also suggest, that the decrease in R&D expenditures is mitigated through CEO stock ownership. There is no significant evidence that the reductions in R&D expenditures would be explained by poor firm performance or decreases in investment expenditures. These results suggest, that CEOs indeed tend to improve the short-term earnings performance of their companies, and thus try to alleviate their career horizon concerns. (Dechow & Sloan, 1991)



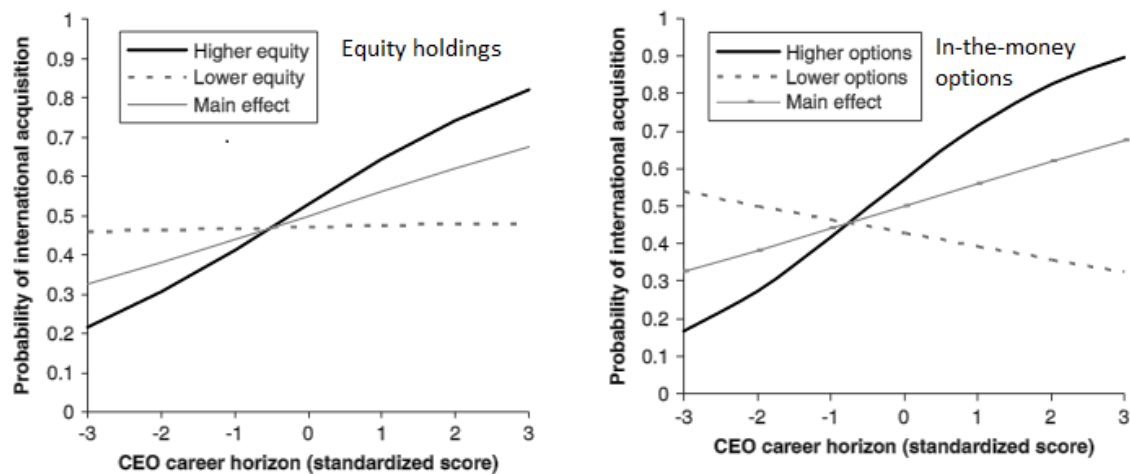
**Figure 7.** Relationship between firm performance (measured with ROA) and CEO age at various levels of CEO ownership. (Barker et al., 2012)

CEOs who are approaching their retirement age often still wish to stay active by serving on corporate boards. For them, career horizon concerns increase as they approach retirement, which partly explains the decrease of the riskiness of their behavior during the final years. This can be seen in multiple ways. The investment policies of older CEOs are less risky, and thus the firm risk is also lower. Also, the operations of their companies are more diversified, the operating leverage is lower, and their acquisitions are more diversified. When both the CEO and the second-in-command are older, the riskiness of corporate policies and the firm risk are the lowest. When these managers are younger, the riskiness is at its highest. In addition, there is a negative correlation between CEO age and the volatility of stock returns of the company of which they are in charge. Serfling (2014) examines a trading strategy, where one goes short in portfolio of stocks consisting of companies with older CEOs, and goes long in a portfolio of stocks of firms with younger CEOs. This strategy would lead to positive risk-adjusted returns. Overall, firm performance and risk-taking behavior can be significantly affected by CEO age. (Serfling, 2014)



**Figure 8.** Relationship between firm performance (measured with ROA) and CEO age at various levels of dynamism. (Barker et al., 2012)

CEOs, who are further away from their retirement, are more inclined to make international acquisitions. Furthermore, CEOs who are close to their retirement age and have high levels of equity holdings and unexercised in-the-money options, are less willing to make international acquisitions than CEOs at the same age with less equity holdings and unexercised in-the-money options. This suggests that, on top of their relatively high age, the amount CEOs' holdings affect firm risk taking and thus also firm performance. This is due to CEO career concerns, which CEOs try to mitigate with legacy conservation and wealth preservation. (Beamish & Matta, 2008)



**Figure 9.** Moderation effect of equity holdings and in-the-money option holdings on CEO career horizon. (Beamish & Matta, 2008)

While multiple studies show that CEOs are more risk-averse during their final years, this does not seem to always be the case. Conyon & Florou (2006) find, that neither capital expenditures nor research and development expenditures change during the last year of before CEO's retirement. Furthermore, leadership structure or board size do not seem to affect corporate investment during the last year of CEO tenure. However, there are some significant changes. In companies with insider-dominated boards, cuts in fixed asset spending are less likely during the departure of CEO. There is also evidence, that when CEO retires, outside directors' stock ownership is associated with increases in capital expenditure. In addition, outsider equity ownership and insider board monitoring

may be used as substitute mechanisms to ensure that the focus of retiring CEO stays activities that create value for the company. (Conyon & Florou, 2006)

CEOs leave their duties voluntarily or they are forced out by the board. More than half of them receive severance pay that is often a multimillion dollar separation package. Rather than under employment contracts, most of the severance packages are paid discretionarily by the board. CEOs who are forced out receive more severance than those who leave their duties as CEOs voluntarily. Reason for this is that those who leave voluntarily – either due to retirement or another position - will often continue as board members, and thus continue to receive benefits. They are also likely to retire with larger amount of accumulated equity compensation. When it comes to forced turnover, younger CEOs receive more severance than older CEOs, because dismissal costs for younger CEOs are higher. In addition, only when CEO turnover is voluntary, are the shareholder reactions to disclosed separation agreements negative. (Yermack, 2006)

## 4. DATA AND METHODOLOGY

In this chapter, I will first present both the main and the additional hypotheses, which I will be testing. Then, I will provide an overview of how the data sample was collected and formed. After that, I will present the descriptive statistics of the data sample. Finally, I will explain the methodology used in this study to address the research question and test the hypotheses.

### 4.1. Hypotheses

This study aims to answer multiple questions concerning the factors behind the number post-tenure outside directorships gained by former CEOs. The main objective is to find out whether the performance as a CEO affects the chances of gaining outside board seats post-tenure. Companies' performance is used as a proxy for CEOs' performance. It is studied as a whole and also in two parts, which consist of abnormal stock returns and accounting returns.

#### 4.1.1. Main hypotheses

The first main hypothesis (H1) attempts to shed some light on the relation of a company's performance and the number of post-tenure outside directorships gained by the CEO of the company. Finding answers for this issue is the primary goal of this study.

*H1: Firm performance during CEO tenure affects the number of CEO's post-tenure board seats.*

The two other main hypotheses H2 and H3 try to answer the same question as the first main hypothesis, difference being that while the first hypothesis observed firm performance as a whole, the second and the third hypotheses split firm performance into

two categories. The second hypothesis studies the effects of abnormal stock returns and uses it as a proxy for firm performance.

*H2: Abnormal stock returns during CEO tenure affect the likelihood of CEO receiving a post-retirement board seat in his own company.*

The third hypothesis examines the effects of accounting returns during CEOs' tenures on the number of outside directorships these CEOs gain post-tenure. The accounting returns used in this study are ROE and ROA, and they are used as proxies for firm performance.

*H3: Accounting returns during CEO tenure affect the likelihood of CEO receiving post-retirement outside directorships.*

These three main hypotheses seek answers to the primary target of this study, in other words does firm performance affect CEOs chances of gaining post-tenure outside board seats. The main hypotheses approach the question from slightly different angles in hopes of offering more specific answers to the question at hand.

#### 4.1.2. Additional hypotheses

The additional hypotheses of this study do not focus on firm performance as the driving force behind the number CEOs' post-tenure board seats, but offer other possible factors that might affect just the same.

The first additional hypothesis (H4) attempts to find out whether the length of CEO's tenure has effect on the probability of the CEO gaining post-tenure outside directorships. The lengths of the tenures of the CEOs in this study vary largely and this hypothesis asks whether the CEOs with tenures of different lengths have different numbers of directorships in their career horizon.



*H4: The length of CEO's tenure affects the number of post-tenure directorships gained by the CEO.*

Despite the Sarbanes-Oxley –act of 2002, CEO duality is still very common in the financial companies in this study. The second additional hypothesis (H5) asks if CEO duality affects the CEO's chances of gaining post-tenure directorships. In other words, does the experience gained as a chairman of board have any weight, when a companies search for new outside directors?

*H5: A CEO who has experienced CEO duality is likelier to gain more post-tenure directorships than CEOs with no experience of CEO duality.*

#### 4.2. Data

The data that this empirical study is based on is collected from four different sources. These sources are Datastream, the annual reports of the financial companies in question, the official websites of these companies, and the Executive Profiles provided by Bloomberg.com. All the data collected for this study is from the beginning of 2002 to the end of 2016.

This data can be roughly divided into two categories: firm-specific data and CEO-specific data. Firm-specific data consists of return on equity (ROE), return on assets (ROA) and abnormal stock returns. Monthly values are used for all of the three variables. CEO-specific data, on the other hand, consists of the number of outside directorships of CEOs received post-tenure, length of CEO tenure, and CEOs' role on the board during tenure, in other words were there CEO duality or was the CEO only a regular board member.

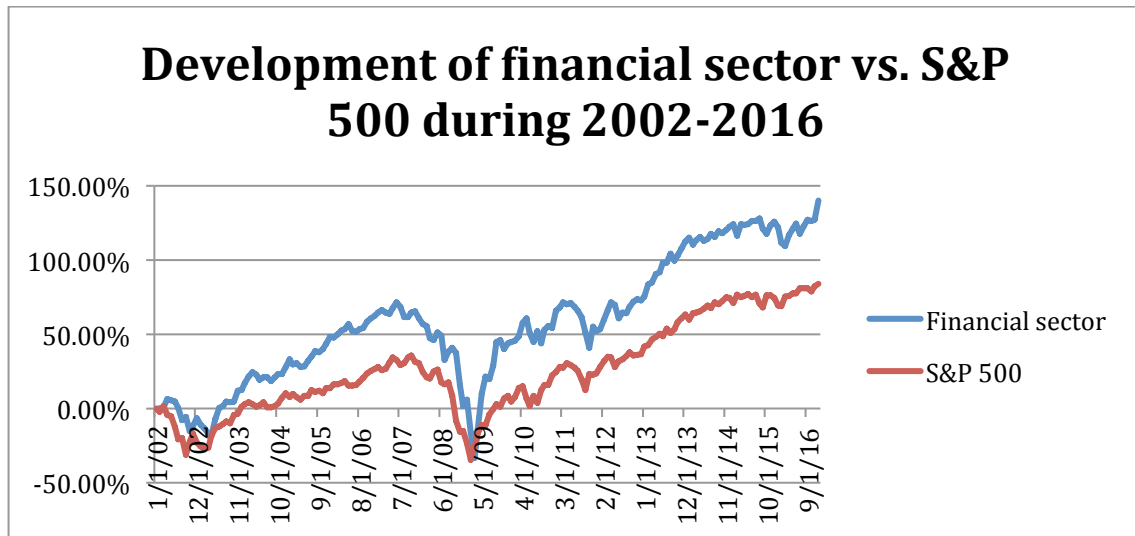
Sources	Data
Datastream	Firm-specific data (ROE, ROA, Abnormal stock returns)
Annual reports, companies' websites, Bloomberg.com	CEO-specific data (Length of tenure, role on the board, number of post-tenure outside directorships)

Number of financial companies in the financial sector of S&P 500 -index	64
Number of CEOs whose tenure in these companies ended during 2002-2015	70

**Table 1.** The sources and the data collected from them, and the number of financial companies and CEOs examined in this study.

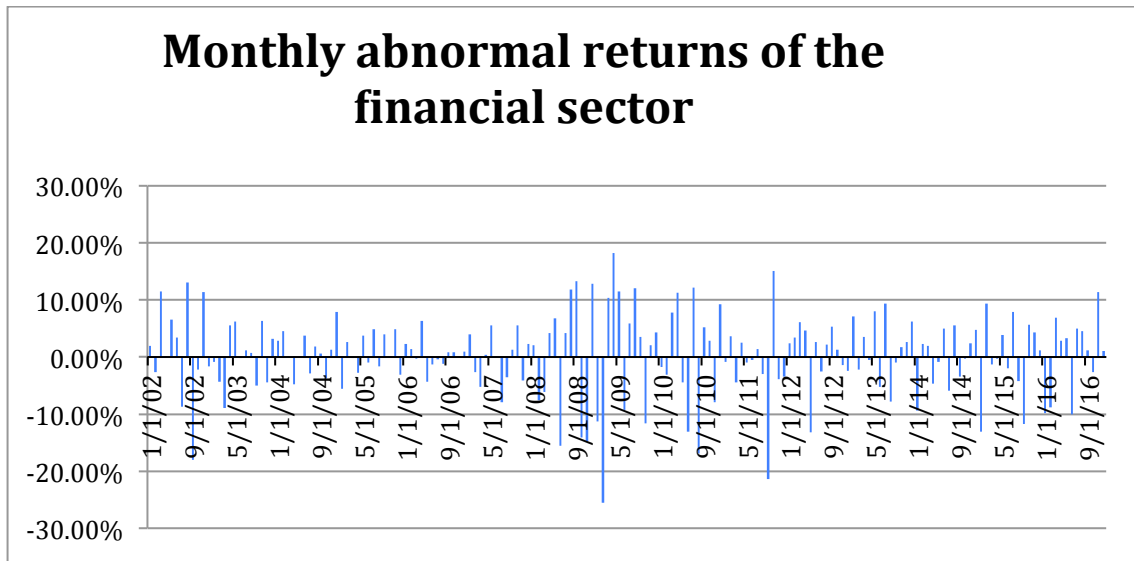
The aforementioned data is collected for all 64 companies in the financial sector of the S&P 500 –index. This study focuses only on the financial sector of the S&P 500 due to its relatively large number of companies, and its wide range of companies in relation to their size, background and age, for example. It is also imperative to restrict the study to one specific sector, because the rate of CEO turnover varies largely when comparing different sectors with each other. Although there are some very long CEO careers in the financial sector, mostly regarding company founders, the median tenure length is 6,9 years, which is relatively low.

In addition, I have used the monthly values of the S&P 500 –index from January 1<sup>st</sup> 2002 to January 1<sup>st</sup> 2017 as a proxy for monthly market returns. I used these values to calculate the monthly abnormal stock returns for the single financial companies, as well as for the whole financial sector of the S&P 500 –index.

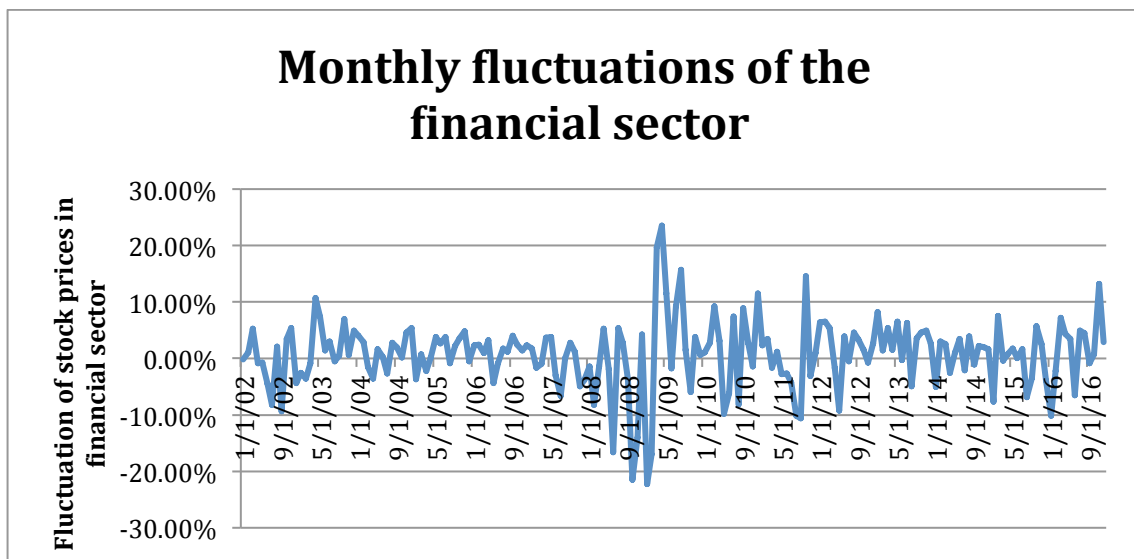


**Figure 10.** Development of S&P 500 –index compared to the development of the financial sector of S&P 500 -index during 2002-2016. (Yahoo Finance)

As can be seen from Figure 10, financial sector of the S&P 500 index has outperformed the index as a whole almost constantly. The financial crisis led the financial sector to drop quite rapidly and more severely than the rest of the S&P 500 –index. After the crisis, the financial sector bounced back remarkably faster than the whole index. Both the volatility and the outperformance of the financial sector can also be seen when looking at the abnormal stock returns of the financial sector as a whole (Figure 11). This rather volatile nature (Figure 12) of the financial sector is one of the reasons for the relatively short CEO tenures, and thus also on the reasons for the financial sector to be the sole focus of this study.



**Figure 11.** Monthly abnormal returns of the financial sector of the S&P 500 –index when compared to the whole S&P 500 –index.



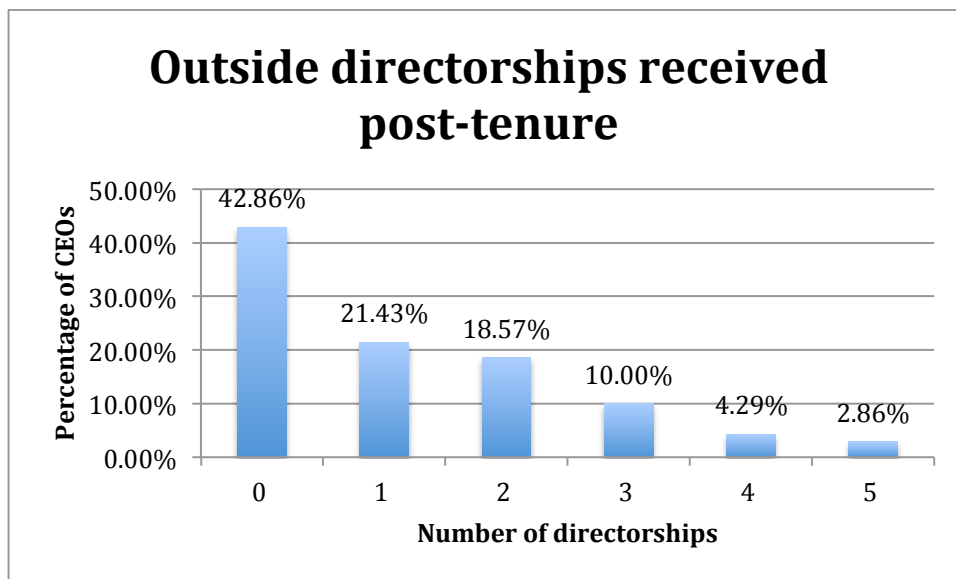
**Figure 12.** Monthly average fluctuations of stock prices in the financial sector of S&P 500- index.

The financial sector of the S&P 500-index consists of 64 financial companies. The firm-specific data collected for this study includes monthly values for both return on equity and return on assets. In addition, the monthly stock prices for these companies has also been collected, and is used to calculate the abnormal returns for both the single

companies and the financial sector of the S&P 500-index. ROE, ROA and the stock prices are all collected from Datastream.

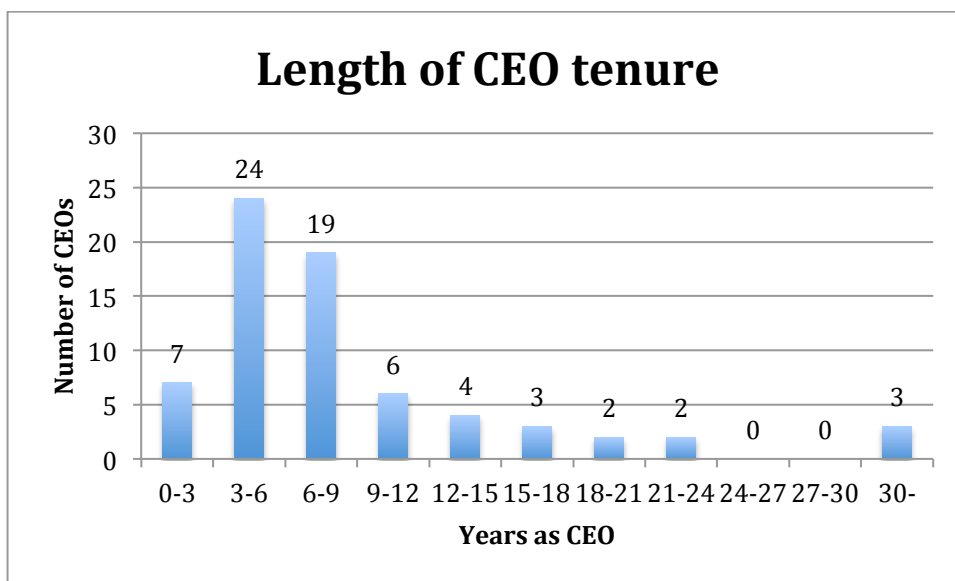
During 2002-2015, there were 70 instances, when a CEO's tenure ended in one of the 64 financial companies of the S&P 500 –index. The period examined in this study is limited to 2002, due to the integration of the Sarbanes-Oxley Act in 2002. Also, CEOs whose tenure ended later than December 2015 were omitted from the study, because CEOs rarely receive outside directorships immediately after their tenure ends. When 2016 is omitted, there is at least a year after tenure ending for them to have received board seats. This also means that those CEOs, whose tenure ended in 2016, but have not yet received outside directorships, will not skew the results of this study. Acting CEOs and other temporary CEOs, whose tenure lasted less than six months, have also been omitted from this study.

The CEO-specific data, which has been collected for all 70 CEOs, consists of three categories: the number of outside directorships the CEOs have received after their tenure ending, the length of CEO tenure, and the CEOs' role on the board before tenure ending. This data is collected from the annual reports of the companies, their official websites, and the Executive Profiles provided by Bloomberg.com.



**Figure 13.** Percentage of CEOs according to the number of outside directorships they received after tenure ending.

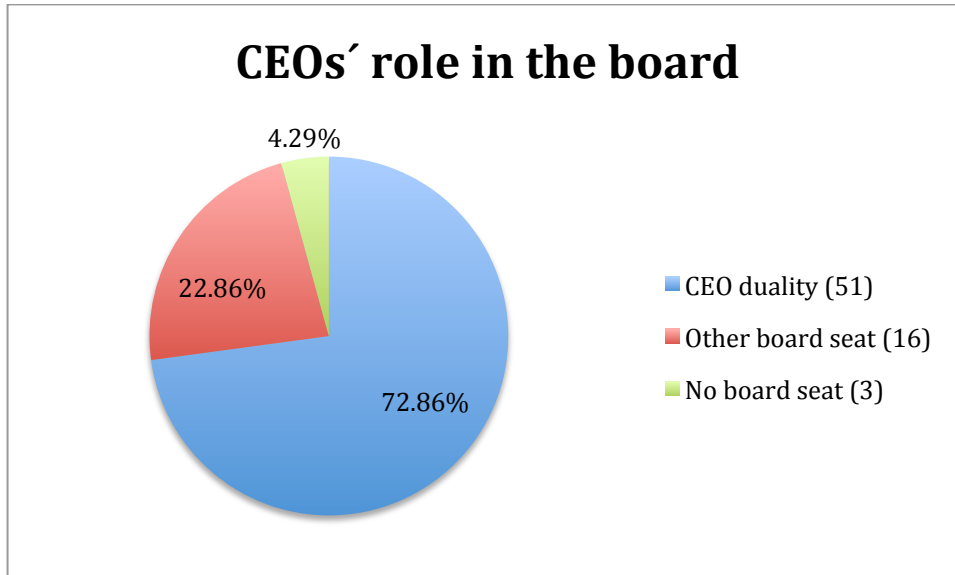
The number of post-tenure outside directorships the former CEOs received varies from zero to five directorships. Almost 43 % of the CEOs in the sample did not receive any corporate directorships after their tenure ended. Almost all of these CEOs fully retired due to their advanced age, or were satisfied with their current number of board seats, and thus were not interested in additional board seats. Over 57 % of the CEOs in the sample however gained board seats after their tenure ended. The number of board seats gained varies from one to five. Fewer directorships are more common than the larger numbers: Almost 40 % of the CEOs gained one or two post-tenure board seats, while only about seven percent gained four or more directorships. The average number of post-tenure outside directorships the CEOs received was 1,2.



**Figure 14.** The lengths of the tenures of those CEOs, who served in the financial companies of the S&P 500 –index. Data shows only those CEOs whose tenure ended during 2002-2016.

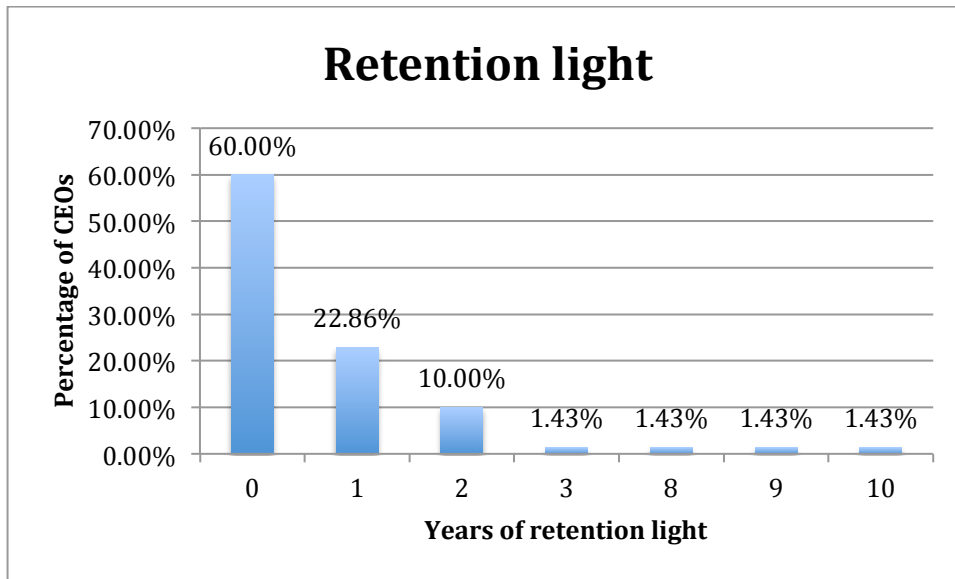
The lengths of the tenures of the 70 CEOs included in this study vary from just over six months to about 46 years. Those decades-long tenures are, however, rather rare: Only three of the 70 CEOs had their tenure lasting longer than 24 years. On the other side of

the spectrum, ten percent of the tenures lasted under three years. Over 61 % of the tenures lasted 3-9 years, with average and median tenures lasting about 9,2 years and 6,9 years, respectively.



**Figure 15.** Number and percentages of CEOs in different roles on the board.

This study divides the role of CEOs in their own boardroom in three categories: CEO duality, other board seat, and no board seat. CEO duality means, that the CEO is also the chairman of the board. Even though the Sarbanes-Oxley Act of 2002 has demanded the roles of CEO and COB to be divided for different persons, CEO duality was still very common for the CEOs in this study. Almost 73 % of the CEOs acted also as the chairman of the board at one point during 2002-2016. Fewer than 23 % of the CEOs were board members, but not in the capacity of COB. Only three out of 70, in other words 4,3 percent of the CEOs had no role on the board of their companies.



**Figure 16.** Percentage of CEOs according to the years of retention light.

Retention light is a policy, where the CEO, whose tenure is coming to an end, stays on the board, usually as the chairman of the board. This way the transition of leadership is considered to be smoother. However, there are negative effects to retention light too: entrenchment, undermining the authority of the new CEO, unwillingness to change, and so on. This is possibly why 60 % of the CEOs in this study did not stay on the board after their tenure ended. The 40 % of the CEOs, who stayed on the board, stayed there anywhere between one and ten years. About 33 % stayed on for one or two years. The remaining six percent stayed on for another three to ten years. The average retention light lasted for 0,9 years.

After collecting all the raw data, the firm-specific data is transformed into CEO-specific data. In other words, I have calculated average values of ROE, ROA and abnormal stock returns of the companies during each of the tenures of the 70 CEOs. Thus, all the different factors collected for the study can be compared with the number of post-tenure outside directorships the CEOs have received.



### 4.3. Descriptive statistics

This chapter includes tables 2 and 3, which show the descriptive statistics of the data examined in this study. Table 2 shows the descriptive statistics for four data categories: The number of outside directorships gained by the CEOs of the study, return on equity of companies during each CEO's tenure, return on assets of companies during each CEO's tenure, and abnormal stock returns of the companies when compared to the whole S&P 500 –index.

The data shows that the companies of the financial sector of S&P 500 had mean ROE and mean ROA of 10,8 % and 2,36 %, respectively. Mean abnormal stock returns of these companies when compared to the whole S&P 500 –index was 0,042 % higher, and median was 0,259 % higher. This shows that the financial sector is more profitable than S&P 500 as a whole, although this does not hold true for all the financial companies, as can clearly be seen from mean LCL abnormal stock returns of -0,234 %. Even though this relatively high profitability of the financial sector under these CEOs might seem like cause for not firing them, one has to remember that most of the CEOs in this study were fired from their post. When the benchmark is changed from the whole of S&P 500 to just the financial sector of the index, the positive results seem to disappear, as can be seen in Table 3.

<i>Alpha (for confidence interval)</i>	5, %			
	<b>Number of outside seats</b>	<b>ROE</b>	<b>ROA</b>	<b>Abnormal returns (vs. S&amp;P 500)</b>
<i>Count</i>	70	68	66	67
<i>Mean</i>	1,2	0,10789	0,02355	0,00042
<i>Variance</i>	1,84348	0,01574	0,00071	0,00013
<i>Standard Deviation</i>	1,35775	0,12544	0,02659	0,01129
<i>Coefficient of Variation</i>	1,13146	1,16265	1,12932	26,99363
<i>Minimum</i>	0,	-0,3141	-0,03371	-0,04488
<i>Maximum</i>	5,	0,44764	0,10108	0,02126
<i>Range</i>	5,	0,7618	0,13478	0,06613

<i>Median</i>	1,	0,12177	0,0156	0,00259
<i>Percentile 25% (Q1)</i>	0,	0,07763	0,00733	-0,00372
<i>Percentile 75% (Q3)</i>	2,	0,17261	0,03028	0,00607
<i>Mean Deviation</i>	1,11429	0,08183	0,01964	0,00825

**Table 2.** Descriptive statistics of outside directorships, ROE, ROA and abnormal returns when compared to S&P 500 –index.

Table 3 shows the same descriptive statistics as table two, but for different factors. These factors are abnormal stock returns when comparing them to the financial sector, the length of the tenures of CEOs, and CEO duality. The most revealing statistic of these is the abnormal returns. When comparing the abnormal returns of the companies during the tenures of the CEOs in this study with other financial companies under different CEOs, it can clearly be seen that the performance of these companies, and hence their CEOs, was subpar: mean mad median are -0,329 % and -0,173 %, respectively. Even the higher performing companies in the mean UCL performed 0,063 % worse by average than their counterparts. CEO seats are notoriously volatile in the financial sector, and this might shed some light on the reasons for it.

*Alpha (for confidence interval)* 5, %

	<b>Abnormal returns (vs. financial sector)</b>	<b>Length of tenure</b>	<b>CEO duality</b>
<i>Count</i>	67	70	70
<i>Mean</i>	-0,00329	9,15894	0,72857
<i>Variance</i>	0,00012	67,44993	0,20062
<i>Standard Deviation</i>	0,01091	8,21279	0,44791
<i>Mean Standard Error</i>	0,00133	0,98162	0,05354
<i>Coefficient of Variation</i>	-3,31168	0,8967	0,61477
<i>Minimum</i>	-0,04531	0,91507	0,
<i>Maximum</i>	0,02171	46,94521	1,
<i>Range</i>	0,06702	46,03014	1,
<i>Median</i>	-0,00173	6,87671	1,

<i>Percentile 25% (Q1)</i>	-0,0086	4,54521	0,
<i>Percentile 75% (Q3)</i>	0,00273	9,98425	1,
<i>Mean Deviation</i>	0,00811	5,27019	0,39551

**Table 3.** Descriptive statistics of tenure length, CEO duality and abnormal returns when compared to financial sector.

#### 4.4. Methodology

The raw data collected for this study is comprised of two main categories: CEO-specific data and firm-specific data. CEO-specific data includes the number of board seats the CEOs gained post-tenure, the length of their tenures, and whether or not they also held a COB seat during their tenure as CEO, i.e. CEO duality. Firm-specific data includes ROE, ROA, and abnormal stock returns measured against the whole S&P 500 –index as well as the whole financial sector. This firm-specific data is transformed into CEO-specific data by calculating the same three values for the time each CEO held their post. In other words, the data on firm performance is transformed into reflecting firm performance during each CEO, and thus act as measures of CEO performance.

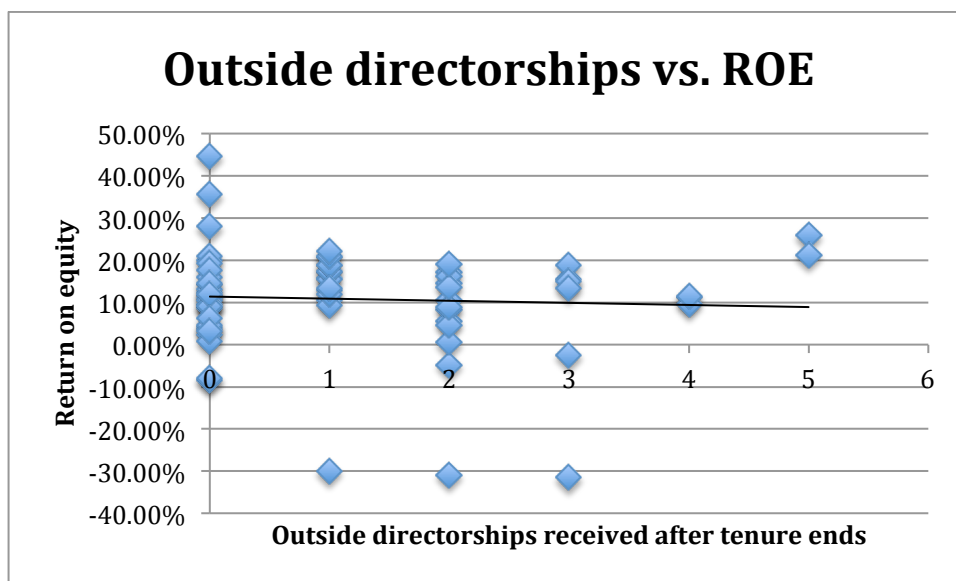
The modified and ready data is used to find out whether CEO performance affects the number of outside directorships they receive post-tenure. This is done by comparing other variables of the data against the number of board seats each former CEO received. The results are shown with covariance matrix, R-values, correlation coefficient matrix, and multiple linear regression.

## 5. RESULTS AND ANALYSIS

This chapter presents the results and analysis from the data. First, the relationships between the number of outside directorship gained by former CEOs and the other variables are presented one by one. Second, the more in-depth results of the data are presented with a covariance matrix, table of R-values, correlation coefficient matrix and multiple linear regression. Lastly, this chapter provides a look on the robustness of the analysis and presents some ideas for further research.

### 5.1. The effect of return on equity

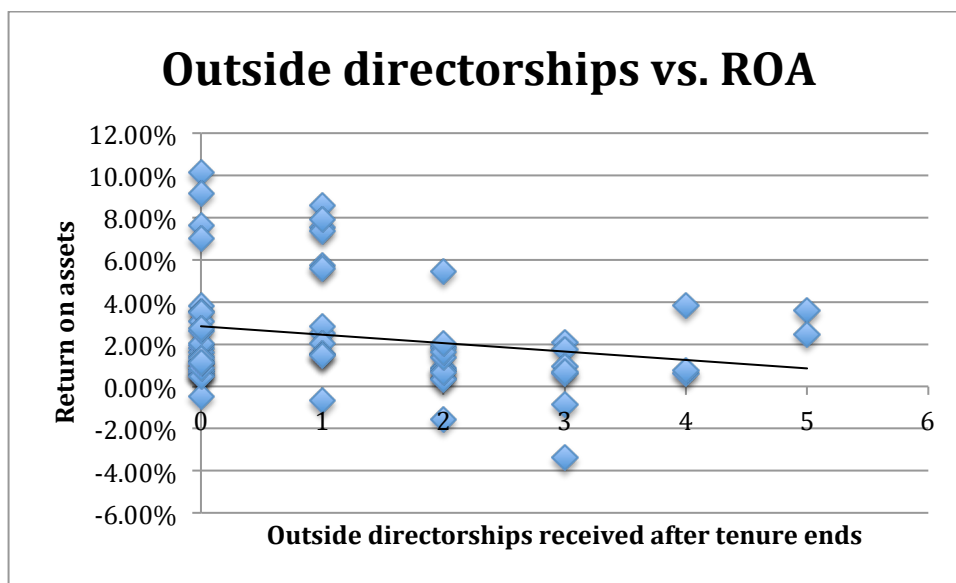
The effect a company's ROE during a CEO's tenure has on the number of directorships that CEO later gains, seems to be quite unimpressive. The trend line is slightly declining when moving from zero outside directorships to five of them. This suggests that higher ROE during tenure as a CEO leads to fewer board seats gained in the future, although the effect is statistically insignificant. The CEOs with five gained post-tenure board seats had rather high ROE-values during their tenure, but the sample of former CEOs with five outside directorships is too small to make any robust conclusions.



**Figure 17.** A scatter plot of CEOs based on the number of directorships they received after tenure ended and the return on equity during their tenures as CEO.

### 5.2. The effect of return on assets

Just like the effect of ROE, the effect of ROA on the number of directorships is also negative: higher ROA-values lead to fewer board seats for former CEOs in the future. The trend line is declining a somewhat more severely than with ROE, but the effect is still too little for it to be statistically significant.

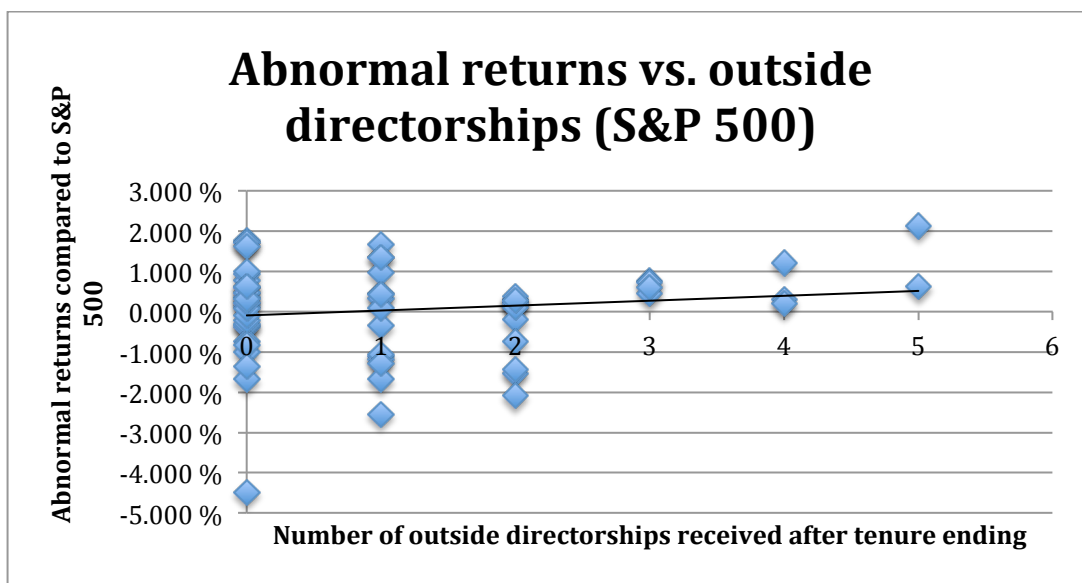


**Figure 18.** A scatter plot of CEOs based on the number of directorships they received after tenure ended and the return on assets during their tenures as CEO.

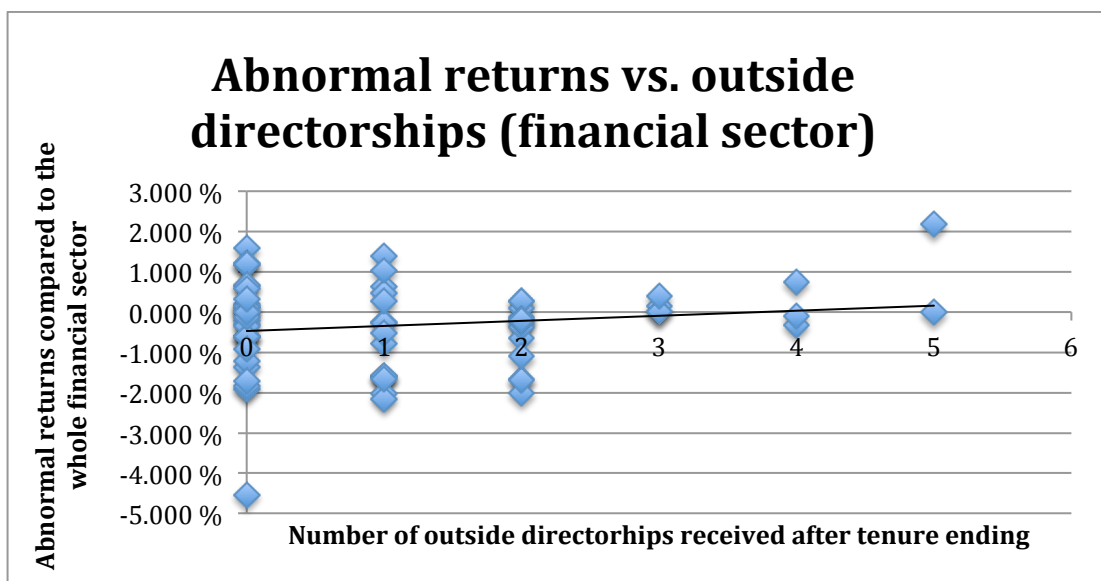
### 5.3. The effect of abnormal stock returns

Where higher ROE and ROA seem to decrease the number of post-tenure board seats, abnormal stock returns have more of an increasing trend line, and thus also positive correlation. In other words, the higher the abnormal stock returns are, the better are the chances to gain more outside directorships post-tenure. This holds true for both abnormal stock returns used in this study: those measured against the whole S&P 500 – index, and those measured against other companies in the financial sector of the S&P

500 –index. Although the slope of the trend lines is almost exactly the same, they do start from slightly different point. The trend line of abnormal returns against S&P 500 –index (Figure 19) starts from approximately 0,0 % abnormal returns at zero board seats, and then increases to 0,5 % abnormal returns at five board seats. On the other hand, the trend line of abnormal stock returns measured against other financial companies (Figure 20) starts from -0,4 % abnormal returns at zero board seats, and then rises to 0,2 % abnormal returns at five board seats. Again, the effects are too small to be statistically significant.



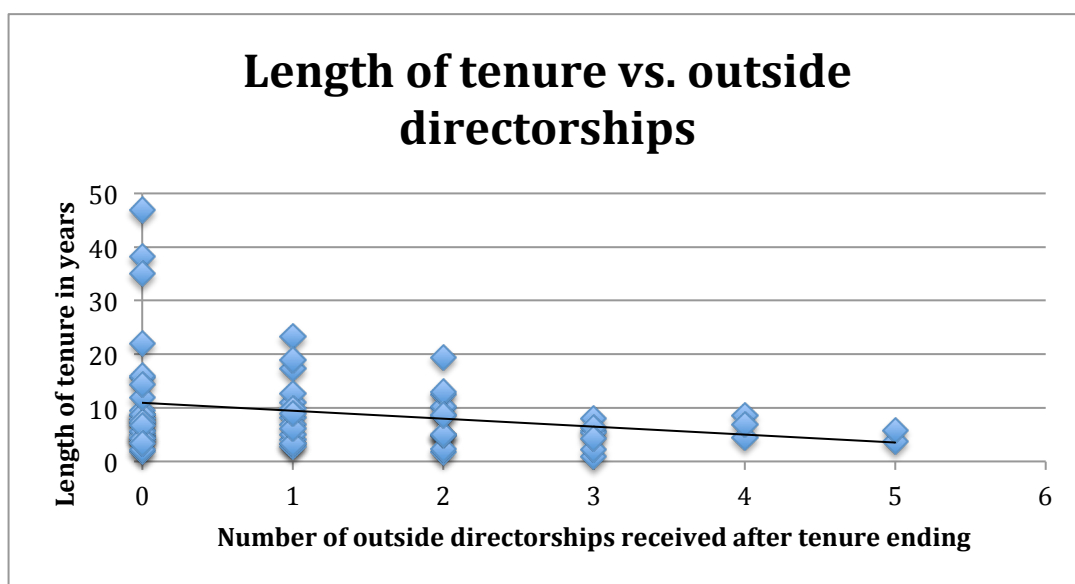
**Figure 19.** Abnormal returns (as measured against S&P 500) vs. outside directorships



**Figure 20.** A scatter plot of CEOs based on the number of directorships they received after tenure ended and the monthly average of abnormal returns (compared to the financial sector of S&P 500) during their tenures as CEO.

#### 5.4. The effect of tenure length

When looking at the effect CEOs' tenure length has on the number of post-tenure outside directorships, one can clearly see that the trend line is more prolific than with the other factors. The trend line of the scatter plot is decreasing quite sharply, thus showing that the correlation is negative. The negative effect tenure length has on the number of board seats is, in fact, statistically significant. In other words, longer tenures as a CEO lead to fewer board seats post-tenure. One must of course remember, that CEOs with tenures lasting for 20 years and longer are also older on average than the CEOs with shorter tenures. These older CEOs with longer tenures are more likely to be inclined towards retiring completely, whereas to younger CEOs tend to continue working after their tenure ends. Thus, they are more active when looking for post-tenure directorships. So even though the negative correlation is statistically significant, it may be explained by the simple fact that older people retire more often than younger people.

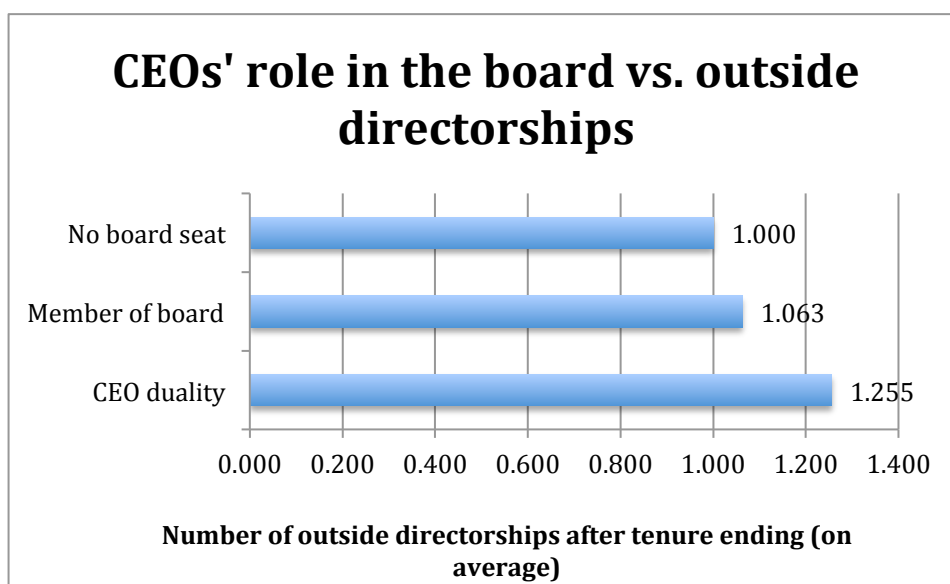


**Figure 21.** A scatter plot of CEOs based on the number of directorships they received after their tenures ended and the length of their tenures.

### 5.5. The effect of CEO duality

One of the objectives of The Sarbanes-Oxley –act of 2002 was to decrease the portion of CEOs of publicly traded companies who also have the seat of chairman of board. It has been widely realized, that the act failed to do so, at least in the intended level. This can be seen also in the financial sector.

The CEOs who had no position in their company’s boardroom gained exactly one outside directorship post-tenure, on average. The CEOs who were board members, but not COBs, gained 1,063 board seats post-tenure. And the CEOs of the companies with CEO duality gained 1,255 directorships post-tenure, while the average of all the CEOs in this study was 1,2 board seats gained. The sample of CEOs with no board membership in their respective companies is quite small, but it can be seen that CEOs who have acted as COBs at the same time are more likely to gain more directorships post-tenure. This effect is not, however, statistically significant.

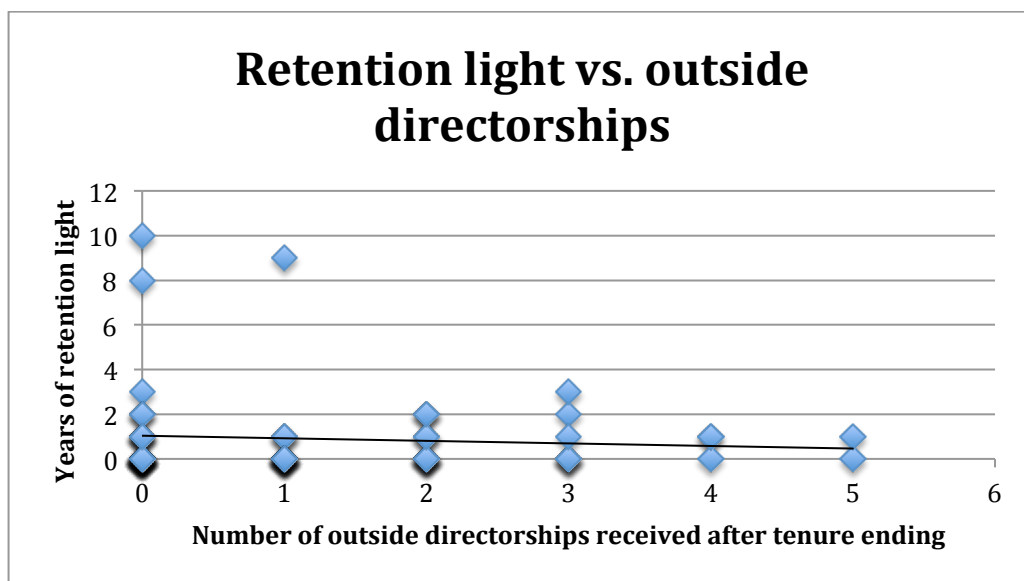




**Figure 22.** The average number of outside directorships received based on the CEOs' role in the boardroom.

#### 5.6. The effect of retention light

Retention light is quite a rare phenomenon in the modern financial sector. While most of the CEOs in this study were at the time also either members of board or COBs, 60 % of the CEOs in this study had not kept their role in the boardroom after their tenures as CEO ended. Thus, the number of years of retention light has no significant effect on the number of board seats they later obtain. Even the few CEOs who served in their respective companies' boardrooms after their tenures as CEOs ended, did not gain but zero or one outside board seats later on.



**Figure 23.** A scatter plot of CEOs based on the number of directorships they received after their tenure ended and the years of retention light.

## 5.7. In-depth look at the results

After presenting an overview look on the results in the previous chapter, the study now presents the more in-depth look on the matter. To provide this in-depth look, the results on multiple different tests are presented. The study focuses on the covariance values, R-values and p-values between the number of outside directorships and the other variables. The tables show the relationships between all the variables with each other, but the focus is on the values regarding the number of outside board seats.

### 5.7.1. Covariance and correlation

As can be seen from the covariance matrix (Table 4), three of the values regarding the number of outside board seats are positive and three are negative. The positive ones are both of the abnormal returns and CEO duality. They have a positive effect on the number of board seats. Variables with negative covariance values are ROE, ROA and length of tenure. Interestingly, all the other values in the table are positive, with the exception of CEO duality's effect on ROA. Almost all the variables have a positive effect on each other, but half of them have a negative effect on the number of post-tenure directorships for CEOs.

<b>Covariance</b>	<i>Outside seats</i>	<i>ROE</i>	<i>ROA</i>	<i>Abn. returns 1</i>	<i>Abn. returns 2</i>	<i>Lenght of tenure</i>	<i>CEO duality</i>
<i>Outside seats</i>	1,81714						
<i>ROE</i>	-0,00896	0,0155					
<i>ROA</i>	-0,00751	0,00173	0,0007				
<i>Abnormal returns 1</i>	0,00213	0,00047	0,00005	0,00013			
<i>Abnormal returns 2</i>	0,0022	0,00036	0,00003	0,00012	0,00012		
<i>Lenght of tenure</i>	-2,6932	0,19679	0,05391	0,0194	0,01383	66,48636	
<i>CEO duality</i>	0,04	0,01055	-0,00074	0,00049	0,00011	0,98291	0,19776

**Table 4.** Covariance between all the variables.

The R-values are the standardized versions of the covariance values. Thus, three of the values are positive and three are negative in this case too. The R-values are between -1 and 1. The relationships with negative values have negative correlation, and vice versa. The values closer to zero are weaker correlations, and values closer to -1 or 1 are stronger. The R-values regarding the number of outside board seats are 0,067 and 0,154

for the positive ones, and between -0,054 and -0,245 for the negative ones. The strongest correlation is between outside seats and tenure length, while the weakest is between outside seats and ROE.

<i>Variable vs. Variable</i>	<i>R</i>	<i>No# of valid cases</i>
<i>Abnormal returns 2 vs. Abnormal returns 1</i>	0,96974	67
<i>ROA vs. ROE</i>	0,5722	65
<i>Abnormal returns 1 vs. ROE</i>	0,37592	66
<i>Abnormal returns 2 vs. ROE</i>	0,29633	66
<i>CEO duality vs. Length of tenure</i>	0,27107	70
<b><i>Length of tenure vs. Outside seats</i></b>	<b>-0,24502</b>	<b>70</b>
<i>Length of tenure vs. ROA</i>	0,245	66
<i>Length of tenure vs. Abnormal returns 1</i>	0,21081	67
<b><i>ROA vs. Outside seats</i></b>	<b>-0,2076</b>	<b>66</b>
<i>Length of tenure vs. ROE</i>	0,19296	68
<i>CEO duality vs. ROE</i>	0,18878	68
<i>Abnormal returns 1 vs. ROA</i>	0,16824	63
<i>Length of tenure vs. Abnormal returns 2</i>	0,15549	67
<b><i>Abnormal returns 2 vs. Outside seats</i></b>	<b>0,15365</b>	<b>67</b>
<b><i>Abnormal returns 1 vs. Outside seats</i></b>	<b>0,14364</b>	<b>67</b>
<i>Abnormal returns 2 vs. ROA</i>	0,11694	63
<i>CEO duality vs. Abnormal returns 1</i>	0,0985	67
<b><i>CEO duality vs. Outside seats</i></b>	<b>0,06673</b>	<b>70</b>
<i>CEO duality vs. ROA</i>	-0,06308	66
<b><i>ROE vs. Outside seats</i></b>	<b>-0,05359</b>	<b>68</b>
<i>CEO duality vs. Abnormal returns 2</i>	0,02343	67

**Table 5.** R-values of variable vs. variable.

As can be seen from the correlation coefficient matrix, the effect of tenure length on the number of outside post-tenure directorships is the only variable that gives a low enough p-value to be statistically significant. The p-value of tenure length is approximately 0,041, which is below the 0,05 critical level of significance. The p-values for other variables vary from 0,094 to 0,664. In other words, they are not statistically significant. Interestingly, the p-value for the relationships between CEO duality and length of tenure is 0,023, which is well below the significance level of 0,05. The R-value of the two is 0,271. In other words, CEO duality seems to have a positive effect the length of CEOs' tenures.

**Correlation Coefficients Matrix, part 1.**Missing values  
removalPairwise  
deletion

		Outside directorships	ROE	ROA	Abnormal returns 1
<b>Outside directorships</b>	<b>R</b> <i>R Standard Error t p-value H0 (5%)</i>	<b>1,</b>			
<b>ROE</b>	<b>R</b> <i>R Standard Error t p-value H0 (5%)</i>	<b>-0,05359</b> 0,01511 -0,43597 0,66424 <i>accepted</i>	<b>1,</b>		
<b>ROA</b>	<b>R</b> <i>R Standard Error t p-value H0 (5%)</i>	<b>-0,2076</b> 0,01495 -1,69781 0,09412 <i>accepted</i>	<b>0,5722</b> 0,01068 5,53792 5,34846E- 7 <i>rejected</i>	<b>1,</b>	
<b>Abnormal returns 1</b>	<b>R</b> <i>R Standard Error t p-value H0 (5%)</i>	<b>0,14364</b> 0,01507 1,17019 0,24601 <i>accepted</i>	<b>0,37592</b> 0,01342 3,24541 0,00182 <i>rejected</i>	<b>0,16824</b> 0,01593 1,33297 0,18699 <i>accepted</i>	<b>1,</b>
<b>Abnormal returns 2</b>	<b>R</b> <i>R Standard Error t p-value H0 (5%)</i>	<b>0,15365</b> 0,01502 1,25366 0,21426 <i>accepted</i>	<b>0,29633</b> 0,01425 2,48213 0,01553 <i>rejected</i>	<b>0,11694</b> 0,01617 0,91966 0,361 <i>accepted</i>	<b>0,96974</b> 0,00092 32,0216 0, <i>rejected</i>
<b>Length of tenure</b>	<b>R</b> <i>R Standard Error t p-value H0 (5%)</i>	<b>-0,24502</b> 0,01382 -2,08404 0,04092 <i>rejected</i>	<b>0,19296</b> 0,01459 1,59761 0,11477 <i>accepted</i>	<b>0,245</b> 0,01469 2,02164 0,04715 <i>rejected</i>	<b>0,21081</b> 0,0147 1,73871 0,08661 <i>accepted</i>
<b>CEO duality</b>	<b>R</b> <i>R Standard Error t p-value H0 (5%)</i>	<b>0,06673</b> 0,01464 0,55147 0,58312 <i>accepted</i>	<b>0,18878</b> 0,01461 1,56172 0,123 <i>accepted</i>	<b>-0,06308</b> 0,01556 -0,50564 0,61474 <i>accepted</i>	<b>0,0985</b> 0,01524 0,79802 0,42763 <i>accepted</i>

**Table 6.** Correlation coefficient matrix, part 1.

**Correlation Coefficients Matrix, part 2.***Missing values  
removal**Pairwise  
deletion*

		<b>Abnormal returns 2</b>	<b>Length of tenure</b>	<b>CEO duality</b>
<b>Outside seats</b>	<b>R</b> <i>R Standard Error t p-value H0 (5%)</i>			
<b>ROE</b>	<b>R</b> <i>R Standard Error t p-value H0 (5%)</i>			
<b>ROA</b>	<b>R</b> <i>R Standard Error t p-value H0 (5%)</i>			
<b>Abnormal returns 1</b>	<b>R</b> <i>R Standard Error t p-value H0 (5%)</i>			
<b>Abnormal returns 2</b>	<b>R</b> <i>R Standard Error t p-value H0 (5%)</i>	<b>1,</b>		
<b>Length of tenure</b>	<b>R</b> <i>R Standard Error t p-value H0 (5%)</i>	<b>0,15549</b> 0,01501 1,26905 0,20875 <i>accepted</i>	<b>1,</b>	
<b>CEO duality</b>	<b>R</b> <i>R Standard Error t p-value H0 (5%)</i>	<b>0,02343</b> 0,01538 0,18898 0,85067 <i>accepted</i>	<b>0,27107</b> 0,01363 2,32225 0,02322 <i>rejected</i>	<b>1,</b>

**Table 7.** Correlation coefficient matrix, part 2.

### 5.7.2. Multiple linear regressions

It is clear that there is a massive number of variables and outside factors that one should take into account if one wished to create a model that thoroughly explained if a CEO gets appointed to an outside boardroom. Thus, it is also clear that any model created with the limited amount of variables in this study will not satisfactorily explain that either. Regardless, this study presents for different models below. All the models have two standard variables, which are length of tenure and CEO duality. All four models have a different third variable. These variable are the four variables measuring the companies' performance: ROE, ROA, abnormal returns 1 and abnormal returns 2.

The p-levels of the regressions are between 0,07832 and 0,15659. This means that the models are not statistically significant. Again, the only variable that clearly has an effect on the number of outside board seats the length of tenure with a p-level under 0,05 in three out of the four models. All the other variables are clearly statistically insignificant.

#### Regression 1 Statistics (Length of tenure, CEO duality and ROE)

<i>R</i>	0,27875
<i>R-square</i>	0,0777
<i>Adjusted R-square</i>	0,03447
<i>S</i>	1,32874
<i>N</i>	68

**Outside seats = 1,32604 - 0,0455 \* Length of tenure + 0,44892 \* CEO duality - 0,3055 \* ROE**

#### ANOVA

	<i>d.f.</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>p-level</i>		
<i>Regression</i>	3,	9,51989	3,1733	1,79735	0,15659		
<i>Residual</i>	64,	112,99481	1,76554				
<i>Total</i>	67,	122,51471					

	<i>Coefficient</i>	<i>Standard Error</i>	<i>LCL</i>	<i>UCL</i>	<i>t Stat</i>	<i>p-level</i>	<i>H0 (5%)</i>
<b>Intercept</b>	1,32604	0,33427	0,65826	1,99381	3,96699	0,00019	<i>rejected</i>
<b>Length of tenure</b>	-0,0455	0,02078	-0,0870	-0,00399	-2,18966	0,0322	<i>rejected</i>
<b>CEO duality</b>	0,44892	0,37901	-0,3082	1,20607	1,18445	0,24062	<i>accepted</i>
<b>ROE</b>	-0,3055	1,33224	-2,9669	2,35595	-0,22932	0,81935	<i>accepted</i>
<i>T (5%)</i>	1,99773						

**Table 8.** Multiple linear regression with ROE

A multiple linear regression with the variables length of tenure, CEO duality and ROE yields an R-squared value of 0,0777. This model explains about 7,8 % of the response variables variation. P-value of this model is 0,1566. In other words, the results from this are statistically insignificant. When looking at the p-values of individual variables, one can see that the length of tenure is the only variable that has a statistically significant effect on the response variable with p-value under 0,05.

**Regression 2 Statistics (Length of tenure, CEO duality and ROA)**

<i>R</i>	0,32066
<i>R-square</i>	0,10282
<i>Adjusted R-square</i>	0,05941
<i>S</i>	1,34019
<i>N</i>	66

**Outside seats = 1,46455 - 0,04164 \* Length of tenure + 0,44643 \* CEO duality - 7,08965 \* ROA**

**ANOVA**

	<i>d.f.</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>p-level</i>		
<i>Regression</i>	3,	12,76224	4,25408	2,36849	0,07924		
<i>Residual</i>	62,	111,35898	1,79611				
<i>Total</i>	65,	124,12121					

	<i>Coefficient</i>	<i>Standard Error</i>	<i>LCL</i>	<i>UCL</i>	<i>t Stat</i>	<i>p-level</i>	<i>H0 (5%)</i>
<b>Intercept</b>	1,46455	0,36254	0,73984	2,18925	4,0397	0,00015	<i>rejected</i>
<b>Length of tenure</b>	-0,04164	0,02141	-0,08444	0,00115	-1,94519	0,05629	<i>accepted</i>
<b>CEO duality</b>	0,44643	0,38936	-0,3319	1,22475	1,14656	0,25597	<i>accepted</i>
<b>ROA</b>	-7,08965	6,51263	-20,1082	5,92891	-1,0886	0,28054	<i>accepted</i>

*T (5%)* 1,99897

*LCL - Lower value of a reliable interval (LCL)*

**Table 9.** Multiple linear regression with ROA

The second regression has the variables length of tenure, CEO duality and ROA. R-squared is 0,103, so it's slightly higher than in the first regression with ROE. This still only explains about 10 % of the response variables variation. In this case, the p-value is 0,079 for the model, and over 0,05 for all individual variables. This means that the effect of this model is statistically insignificant.

**Regression 3 Statistics (Length of tenure, CEO duality and abnormal returns 1)**

<i>R</i>	0,31568
<i>R-square</i>	0,09965
<i>Adjusted R-square</i>	0,05678
<i>S</i>	1,29333
<i>N</i>	67

**Outside seats = 1,24248 - 0,04658 \* Length of tenure + 0,42006 \* CEO duality + 22,50007 \* Abnormal returns 1**

**ANOVA**

	<i>d.f.</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>p-level</i>
<i>Regression</i>	3,	11,66376	3,88792	2,32432	0,08338
<i>Residual</i>	63,	105,38101	1,67271		
<i>Total</i>	66,	117,04478			

	<i>Coefficient</i>	<i>Standard Error</i>	<i>LCL</i>	<i>UCL</i>	<i>t Stat</i>	<i>p-level</i>	<i>H0 (5%)</i>
<b>Intercept</b>	1,24248	0,3284	0,58622	1,89873	3,78343	0,00035	<i>rejected</i>
<b>Length of tenure</b>	-0,04658	0,02039	-0,08732	-0,00584	-2,28489	0,0257	<i>rejected</i>
<b>CEO duality</b>	0,42006	0,37104	-0,32141	1,16153	1,13209	0,26189	<i>accepted</i>
<b>Abnormal returns 1</b>	22,50007	14,43643	-6,34884	51,34897	1,55856	0,12411	<i>accepted</i>
<i>T (5%)</i>	1,99834						

**Table 10.** Multiple linear regression with abnormal returns 1

The third regression with the variables length of tenure, CEO duality and abnormal returns 1 yields the R-squared value of 0,09965. This means that this model also explains about 10 % of the response variables movements. The p-value of the model is 0,083, which means that the effect is statistically insignificant. For individual variables, CEO duality and abnormal returns 1 have p-values over 0,05, while length of tenure has the p-value of 0,0257.

**Regression 4 Statistics (length of tenure, CEO duality and abnormal returns 2)**

<i>R</i>	0,31884
<i>R-square</i>	0,10166
<i>Adjusted R-square</i>	0,05888
<i>S</i>	1,29189
<i>N</i>	67

**Outside seats = 1,29274 - 0,04551 \* Length of tenure + 0,4571 \* CEO duality + 23,68294 \* Abnormal returns 2**



**ANOVA**

	<i>d.f.</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>p-level</i>
<i>Regression</i>	3,	11,89883	3,96628	2,37646	0,07832
<i>Residual</i>	63,	105,14595	1,66898		
<i>Total</i>	66,	117,04478			

	<i>Coefficient</i>	<i>Standard Error</i>	<i>LCL</i>	<i>UCL</i>	<i>t Stat</i>	<i>p-level</i>	<i>H0 (5%)</i>
<b>Intercept</b>	1,29274	0,33329	0,62671	1,95876	3,87872	0,00025	<i>rejected</i>
<b>Length of tenure</b>	-0,04551	0,02023	-0,0859	-0,00509	-2,24982	0,02796	<i>rejected</i>
<b>CEO duality</b>	0,4571	0,37036	-0,283	1,1972	1,23421	0,22171	<i>accepted</i>
<b>Abnormal returns 2</b>	23,68294	14,75755	-5,8076	53,17354	1,6048	0,11354	<i>accepted</i>

*T (5%)* 1,99834

**Table 11.** Multiple linear regression with abnormal returns 2

For the last regression, with variables length of tenure, CEO duality and abnormal returns 2, the value of R-squared is 0,102. In other words, this model also explains about 10 % of the response variables movements. The p-value for this model is 0,07832, which means that its effect is statistically insignificant. Once again, length of tenure is the only individual variables with p-value under 0,05.

## 6. CONCLUSIONS

The main purpose of this study is to examine whether firm performance during CEO tenure affects the CEO's chances of being selected to the board of another company. Many CEOs are interested in serving on a board of directors during their professional career, as well as after retirement from CEO duties, but poor firm performance during the CEO tenure might decrease their chances of receiving those independent directorships. The success during the tenure as CEO is measured using ROA, ROE and abnormal stock returns. This study also takes a look at the effects of other variables on the number of post-tenure board seats, such as the length of tenure and CEO duality.

This study focuses on CEOs from the financial sector of S&P 500-index, whose tenure has ended between 2002 and 2016. The variables used to measure the success of CEOs, as well as the other variables, are compared to the number of outside corporate directorships they receive after their tenure ends. This is done on a one-by-one basis, as well as all together using a multiple linear regressions.

The study reveals that the effect of these variables on the number of outside board seats gained is almost non-existent. When examining the variables separately, five of the six variables used proved to have no statistically significant effect on the number of board seats. The only variable with statistically significant effect was the number of years a person spent as the CEO of the company from which he or she retired. This variable had a clear negative correlation of -0,245 with the number of post-tenure outside directorships.

When examining the effect of all the variables the number of board seats as different groups, the outcome was almost exactly the same. Still, only the length of tenure had a statistically significant effect on the number of post-tenure directorships, while the other five variables had basically no effect at all. At this point, of course, this was a rather expected result. To sum it up, out of the three main hypotheses and two additional hypotheses, only the additional hypothesis number four can be accepted, while others are rejected.

The values of R-squared from the multiple linear regressions were only between 0,078 and 0,103. In other words, these variables only explain about 7,8-10,3 % of the response variable's variation. This raises an interesting opportunity for further research: What are the variables that explain the rest of the variation in the response variable? Does the success as a CEO have any effect, or should it be measured with some different variables? Or are the post-tenure board seats gained by just knowing the right people? When scaling this issue a bit further, the question in the end is: Are new outside board members selected objectively based on their merit, or subjectively by knowing the right people? And which option is better for the companies making the selection?

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